



INSTITUTE FOR DEFENSE ANALYSES

**Documentation of Production: Allied
Medical Publication 8 (A) Medical Planning
Guide of NBC Battle Casualties (Chemical)**

Carl A. Curling, Project Leader
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James Colin McGee

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PREFACE

This study was conducted by the Institute for Defense Analyses (IDA) for the Joint Staff, Director for Logistics, Health Service Support Division (J-4 HSSD) and the US Army Office of The Surgeon General (OTSG) in partial fulfillment the task entitled “Revision of NATO Allied Medical Publication 8 (AMedP-8) ‘Planning Guide for the Estimation of NBC Battle Casualties.’” It documents the technical basis for the chemical volume of AMedP-8, detailing the modeling tools used, assumptions made, and data produced during the original AMedP-8 effort.

The chemical volume of AMedP-8 was drafted under the direction of the U.S. Army Office of the Surgeon General for eventual publication by the North Atlantic Treaty Organization (NATO) as Volume III of Allied Medical Publication 8. It was produced through a collaborative effort involving the Institute for Defense Analyses (IDA), Pacific-Sierra Research Corporation (PSR), and Science Applications International Corporation (SAIC).

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EXECUTIVE SUMMARY

This paper captures the technical underpinnings (including algorithms, assumptions, and data) of the most recent version of Allied Medical Publication 8, *Medical Planning Guide of NBC Battle Casualties, Chemical* (AMedP-8 Chemical). It provides users of AMedP-8 Chemical an understanding of the methodology used to obtain the casualty estimates therein, as well as the underlying assumptions and limitations of those estimates.

In collaboration with Pacific-Sierra Research Corporation (PSR) and Science Applications International Corporation (SAIC), the Institute for Defense Analyses (IDA) completed AMedP-8 Chemical in 1998 for the Army Office of the Surgeon General, the custodian of this NATO publication. Ratification occurred in 2001.

AMedP-8 Chemical allows the user to estimate casualties by injury type and time of onset as a function of exposure and resulting performance degradation. Casualty estimates are based on a combination of tactical scenario, agent (GB, VX, or HD), weapon type (multiple rocket launch systems, bombs, tactical ballistic missiles), attack intensity (heavy, moderate, or light), and posture (protection unavailable or protection available). “Worst-case” casualty estimates have been modeled. Thus, attack parameters are based on assumptions that maximize the number of casualties and the resulting workload on the medical system, versus the number of fatalities. During the development of AMedP-8 Chemical, attack locations were chosen to maximize casualties that would enter the medical system. In addition, the developers conducted an assessment of meteorological conditions specific to the agent, munitions, and attack intensity combination considered. Meteorological conditions were selected to maximize the area covered by agent concentrations greater than or equal to incapacitating levels for a given agent and weapon type combination.

The developers of AMedP-8 Chemical used the Naval Surface Warfare Center’s Vapor, Liquid, and Solid Tracking Model (VLSTRACK), Version 1.6.1 to model the dispersion of chemical agent in both liquid and vapor forms. Then, they combined the output of VLSTRACK with a three-dimensional (x, y, and time) representation of a tactical unit within the BioStrike model (developed by IDA) to determine individual

exposures to agents. As depicted in Figure ES-1, calculation of individual chemical agent exposures in any given scenario requires several types of input data, including the tactical arrangement of units on the battlefield, agent data, delivery system and munitions data, and meteorological data.

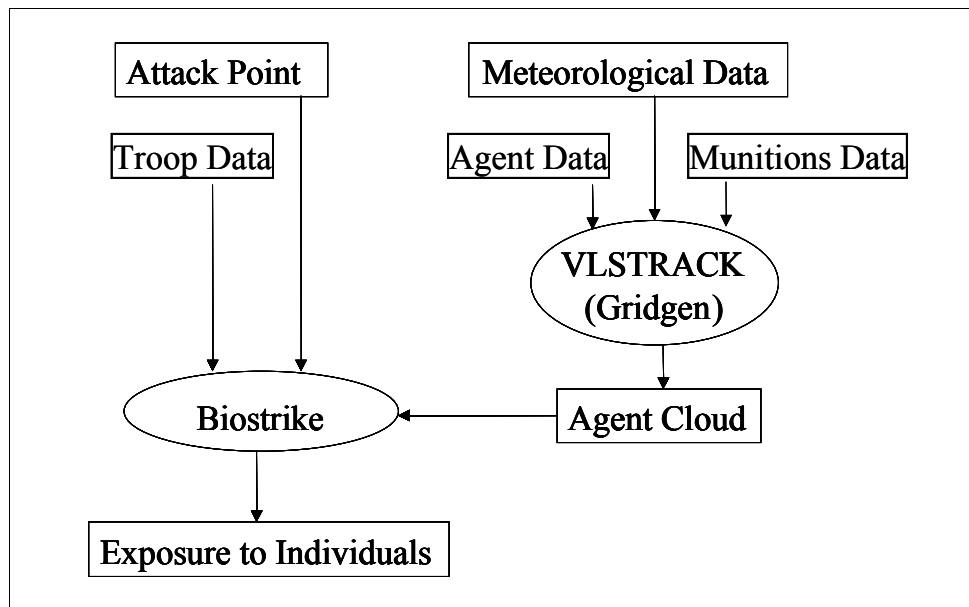


Figure ES-1. Calculation Process of Individual Exposures

AMedP-8 Chemical casualty estimates are based on the evaluation of effects of single attacks against static troop formations. A scenario consists of a tactical arrangement of units on the battlefield, based on doctrinal composition. The scenarios modeled are Heavy Brigade, Forward Maneuver, Movement to Contact; Heavy Brigade, Forward Maneuver, Offense; Heavy Brigade, Forward Maneuver, Defense; Heavy Brigade, Brigade Support Area, Movement to Contact; Heavy Brigade, Brigade Support Area, Offense and Defense; Light Infantry Brigade, Defense; and Support Brigade. Within each scenario, the smallest tactical units or systems are called “icons,” each consisting of one or several personnel (or crew).

For each tactical scenario, agent, weapon type, and intensity combination, AMedP-8 Chemical provides casualty estimates due to exposure to chemical agents for both protection unavailable and protection available cases. In all scenarios, personnel are assumed to be engaged in extra-vehicular activities and unsheltered at the time of attack. Furthermore, all personnel are assumed to be wearing standard battledress uniform at the

initiation of attack. In the protection unavailable case, personnel are assumed to be exposed to the effects of agent in both vapor and liquid forms through the following routes of entry: skin, eyes, and respiratory tract. The impact of duration is not explicitly considered here or in the protection available case. In the protection available case, it is assumed that immediately following the attack, all personnel don the mask within 1 minute and the full protective ensemble within 9 minutes. Personnel are exposed to the agent in both liquid and vapor forms through skin, eyes, and the respiratory tract; however, this exposure occurs only for the time it takes to don a protective mask, assumed to be 1 minute. At this point, individuals are exposed only to the skin effects of agent until they don the rest of their protective equipment, a process that is assumed to take a total of 9 minutes. Thus, respiratory exposures occur for 1 minute, and body surface exposures continue for a total of 9 minutes.

The U.S. Defense Nuclear Agency Improved Casualty Estimation/Intermediate Dosage Program (DICE/IDP) methodology used these exposures to estimate casualty numbers, illness severity, and performance levels over time. In this methodology, individuals' exposure levels are translated into signs and symptoms, resulting in performance degradation over time in the absence of medical prophylaxis or treatment. Therefore, estimates of performance over time provide the basis for determining the fates of individuals in the unit—if and when they become casualties, the nature and severity of illness, the period of illness, and resolution of illness (recovery or fatality). These data are then tabulated to portray the number of casualties in the unit.

In AMedP-8 Chemical, individuals exposed to chemical agent were grouped into categories based the extent of their performance degradation according to the following criteria. Performance was defined as the ability of individuals to carry out general combat tasks. Individuals whose performance was degraded to less than or equal to 25% of original capability were considered “casualties.” Casualties who recovered to greater than or equal to 75% capability were allowed to return to duty (RTD); RTDs whose capability dropped to 25% or below were considered to be “Sick Again.” In a unit, individuals who were not casualties were placed into “Capable” performance bands that reflected those who were not affected (equal to 100%), those who were combat effective (greater than 75% but less than 100%), and those who were performance degraded but not casualties (greater than 50% but less than or equal to 75% and greater than 25% but less than or equal to 50%).

This paper supplements AMedP-8 Chemical with information such as the detailed layout and composition of the brigade-sized units and tactical scenarios they comprise; the doctrinal basis for tactical scenarios; estimates of the amount of exposures received by individuals in each scenario and calculations of corresponding Injury Severity Categories; assumptions and calculation for the process used to optimize attack locations; algorithms and the assumptions of the DICE/IDP methodology used to calculate performance; and the processes used to generate the tables in AMedP-8 Chemical. For all scenarios, this paper presents a series of tables containing exposure data generated by Biostrike. During the development of AMedP-8, this data was subsequently analyzed with the DICE/IDP methodology; however, the performance estimate data was not available for documentation. Instead, this paper describes in detail how to generate that data from the exposure data tables that are given.

Summary tables provide an overview of casualties and fatalities for each of the scenarios modeled, enabling quick overview and comparison between scenarios. This documentation effort provides an understanding of not only how casualty estimates were produced in AMedP-8 Chemical, but also their limitations in accessibility and applicability.

Over the course of documentation, accessibility and applicability were identified as two key areas for future revisions of AMedP-8 Chemical. Accessibility may increase by changing the document format to include hypertext, graphical data presentation, supporting algorithms, and/or supplementary generic software. In addition, extending the information in AMedP-8 to other situations of interest will certainly expand its utility.

I. INTRODUCTION

A. AMedP-8 DOCUMENTATION OBJECTIVES

This report provides a record of the production of Allied Medical Publication 8(A), *Medical Planning Guide of NBC Battle Casualties, Volume III, Chemical* (AMedP-8 Chemical),¹ in a collaborative effort involving the Institute for Defense Analyses (IDA), Pacific-Sierra Research Corporation (PSR), and Science Applications International Corporation (SAIC). The documentation herein discusses the development of AMedP-8 Chemical and describes the overall technical approach, important assumptions, and supportive. Much of the material related to the human response to chemical agent exposure and the resulting degradation of human performance capability is drawn from previous publications by PSR.²

B. AMedP-8 PURPOSE, CONCEPT, AND ASSUMPTIONS

AMedP-8 was designed as a planning guide or manual to estimate the numbers and types of casualties resulting from the military use of nuclear, biological, or chemical weapons. AMedP-8 Chemical provides estimates of casualties and remaining operational strength after a single attack of either a persistent nerve agent, a non-persistent nerve agent, or a blister agent, on a brigade-sized unit during an out-of-area contingency operation. These estimates consist of the number, injury type, and injury severity of individuals in various scenarios. The scenarios, in turn, comprise one of three brigade-sized units—with or without the availability of physical protection—that experience a single release of chemical agent in the unit area.

AMedP-8 has utility across the full range of military personnel who use casualty estimates in planning and executing operations. At the time of its development, this planning guide was envisioned as especially useful for crisis or contingency planning, when a chemical weapon attack is imminent or has occurred and rapid casualty estimation is necessary for response. For example, AMedP-8 would aid operational planners and commanders who must assess impact on mission, select courses of action, maintain awareness, and respond to changes in battle tempo. It would also be useful to personnel managers who must plan for replacements for killed or wounded in action (KIA, WIA), medical casualties, and/or those personnel whose performance is degraded to an extent that warrants replacement or augmentation. It would support surgeons, medical planners, and logistics managers who must plan for and respond to sudden requirements for supplies (especially medical) of unusual types and numbers.

¹ STANAG 2477.

² See McClellan et al., 1998 and references cited therein.

AMedP-8 Chemical was designed to serve as a single reference that leads the user to a table or to a cell in a table that provides a supportable estimate of casualties resulting from the unique combination of units, mission, and weapon of interest. The assumptions made in the design and development of this manual must be clearly understood to allow for proper use of the casualty estimation tables. The most significant of these assumptions are:

- Casualty estimates are based on scenarios consisting of brigade-sized units in tactical formations.
- Missions consist of out-of-area operations. Specifically, the terrain is modeled as a flat, open plain, and troops are dispersed over relatively large areas. Urban, forested, or mountainous terrains are not considered.
- The chemical weapons are persistent nerve agent (VX), non-persistent nerve agent (GB), or blister agent (HD).
- The weapon delivery systems are aerial bombs, tactical ballistic missiles (TBMs), and rounds from multiple rocket launch systems/artillery batteries (MRLS/artillery). Submunitions and non-exploding munitions, such as aerosol generators and aerial spray tanks are not considered. The attack intensities are characterized as light, moderate, or heavy, relative to likely enemy capabilities.
- The optimization of aimpoints was designed to maximize the load on the medical system. Thus aimpoints were chosen to maximize the number of individuals with exposures causing injurious but less-than-lethal effects.
- All personnel are assumed to be engaged in extravehicular, unsheltered activities at the time of chemical attack, and have not been warned or prepared to expect a chemical attack. Only individual physical protection is considered, and two cases are addressed: protection unavailable and protection available.
- All personnel are trained to don individual protective equipment within a certain time limit; they don a protective mask and hood within 1 minute and an overgarment, overboots, and gloves within 9 minutes.
- Weather conditions are modeled as “worst-case,” defined as conditions that would give rise to the largest geographic area covered by agent concentrations greater than or equal to incapacitating levels. Temperature, local attack time, wind speed, and cloud cover reflect the meteorology of Southwest Asia. Worst-case conditions may vary with type of agent and munitions. For example, atmospheric stability, wind speed, and/or temperature may affect agent persistence and/or exposure conditions. Precipitation is not considered; however, HD skin hazards are modeled for wet skin, which is associated with rain and/or warm temperatures and high relative humidity.
- Units are assumed to continue to execute their missions even after a chemical weapon attack. The operational tempo requires all but the most injured personnel to continue operations. An exposed individual must be significantly incapacitated to be evacuated for medical care. This leads directly to the definition of a “casualty.”
- The performance of an exposed individual must be degraded to less than or equal to 25% of original capability for him or her to be considered a casualty

and enter the medical system. However, once an individual is defined as a casualty, he or she must recover to at least 75% of original capability before he or she can leave the medical system and be considered “Returned to Duty” (RTD).

C. AMedP-8 HISTORY

The history of AMedP-8 Chemical begins with the development of Allied Medical Publication 8(A), *Medical Planning Guide of NBC Battle Casualties, Nuclear, Volume I* (AMedP-8 Nuclear).³ Although the current revision of AMedP-8 Nuclear was first conceived in 1992, its basis was established 30 years back with the publication of *A System for Estimating the Medical Load in Nuclear Warfare* on December 14, 1959 by the Walter Reed Army Institute of Research. This new methodology allowed the user to estimate the numbers and types of injuries that would result from an attack, given unit size, yield, and offset distance of a nuclear weapon. It assumed that personnel in the unit were uniformly distributed in an ellipse centered on the offset distance and of the same size as the unit area. At the time of publication, fewer than 15 years after Hiroshima, the casualty estimation methodology was classified SECRET, and only 50 copies were released. This eventually evolved into AMedP-8, which addressed only nuclear effects until 1996. Thus, although chemical and biological weapons were a relatively old technology compared with nuclear weapons, it took most of the 20th century to develop an adequate casualty estimation methodology that allowed for an internationally accepted doctrine.

In 1994, the baseline methodology for nuclear casualty estimates in AMedP-8 Nuclear (founded on human response algorithms developed by the Defense Nuclear Agency’s Intermediate Dose Program (IDP)⁴) was extended from nuclear effects to chemical and biological weapon effects. The Defense Nuclear Agency’s Improved Casualty Estimation (DICE)⁵ methodology extended the modeling of performance degradation from nuclear weapon effects to include the effects of chemical weapons and penetrating wounds. The researchers made the simplifying assumption that performance degradation is similar for similar severities of a symptom, without regard to the causative agent for that symptom. They considered nausea and vomiting debilitating in the same manner, whether caused by overexposure to radiation, poisoning by a nerve agent, or bacterial illness. Given this assumption, the next step entailed defining the symptoms resulting from chemical⁶ or biological⁷ exposure equivalent to those caused by nuclear weapons. Upon defining the symptoms, the researchers could calculate

³ STANAG 2475.

⁴ Anno et al., 1984.

⁵ Deverill et al., 1994.

⁶ Deverill et al., 1994.

⁷ Anno et al., 1998.

performance degradation. Symptoms with no nuclear equivalent required additional research along the lines of IDP.⁸

Following these research efforts, the US proposed a new AMedP-8 revision to the North Atlantic Treaty Organization (NATO) in 1996: the addition of Biological and Chemical casualty estimation as volumes II and III to AMedP-8 Nuclear. The new volumes built upon the concepts introduced in AMedP-8 Nuclear and expanded them to include chemical and biological agents, appropriate delivery systems, and (in Volume II, Biological) additional tactical scenarios. The user of the manual, given some estimate of the types of agents and delivery systems to be used, and the type, posture, and mission of the military unit of interest, could estimate resulting casualties by injury type and time of onset, and performance capability of unit members as a function of time after exposure.

D. AMedP-8 REVISION TIMELINES

The traditions and practices of NATO govern revision and ratification of AMedP-8. Within NATO, the Nuclear, Biological, and Chemical Medical Working Group (NBCMedWG) is tasked with developing doctrine and procedures relevant to the medical protection and treatment of military personnel exposed to Nuclear, Biological, and Chemical (NBC) agents. The NBC Defense Staff Officer of the US Army Office of The Surgeon General (OTSG) serves as the US Head of Delegation for the NBCMedWG and, as such, represents US positions and interests. Outside of the regular meetings of the NBCMedWG, the United States also is Custodian of NATO Standardization Agreements (STANAGs) for the estimation of casualties resulting from the use of NBC weapons. The NATO Medical Planning Guide of NBC Battle Casualties is presented in three volumes: Volume I, Nuclear (STANAG 2475); Volume II, Biological (STANAG 2476); and Volume III, Chemical (STANAG 2477). The Custodian is responsible for maintaining the STANAG in a current and relevant form and reviewing each document at least once every 3 years. The Custodian sponsors Custodial Meetings to formally review documents, and all interested Allies participate. The Custodian proposes revisions to the STANAGs as Study Drafts, which circulate among the Allies for comment. After member nations reach a consensus that the revised STANAG is complete and correct, the Secretary of the NBCMedWG submits this Ratification Draft to the NATO Army Board for distribution, review, implementation, and ratification. Upon approval of ratification, the STANAG is promulgated when two-thirds of the member nations agree to implementation.

⁸ Anno et al., 1994.

The division of AMedP-8 into three STANAGs was based on the 1996 guidance of the NATO Army Board. The Board instructed the NBCMedWG separate nuclear, biological, and chemical casualty estimation into separate STANAGs (2475, 2476, and 2477, respectively). The US, as Custodian, proposed the development of AMedP-8 Chemical to NATO in 1996, followed by Study Draft 1 in 1997. Study Draft 2 followed rapidly on September 25, 1997, and the US presented Study Draft 3 at the NBC Medical Working Group meeting in 1998. Upon integration of final comments into the document, the US distributed the Ratification Draft to the nations on September 10, 1998. By 2000, five nations (BE, GR, LU, TU, NL) had responded to the ratification request. Only one (NL) chose not to ratify. In 2001, five more nations had ratified (CZ, DA, IT, UK, US), still one nation short of the requirement for promulgation. That requirement was met in 2002 when two more nations (CA, SP) ratified the document. AMedP-8 Chemical STANAG 2477 was promulgated on April 25, 2002. At this time (2004), a total of 12 nations (all above, plus GE) have ratified AMedP-8 Chemical.

II. EVOLUTION AND OVERVIEW OF AMedP-8 CHEMICAL

The second of three planned volumes of AMedP-8 to be developed, the chemical volume, incorporates the same underlying philosophy, approach, and format first established in the nuclear volume. Inherent differences between chemical and nuclear warfare warrant different assumptions, inputs, and analytical tools to estimate casualties. This section compares the assumptions, inputs, and methodology used in the nuclear and chemical volumes.

A. AMedP-8 CHEMICAL DERIVES FROM AMedP-8 NUCLEAR

Development of AMedP-8 Chemical was guided by the principle that it be as consistent as possible with AMedP-8 Nuclear. Thus, many of the inputs, assumptions, and formatting of AMedP-8 Nuclear have been adopted regarding tactical scenarios, attack details, casualty estimation methodology, and presentation format of estimates.

1. Tactical Scenarios

AMedP-8 Chemical considers the same seven tactical scenarios as AMedP-8 Nuclear:

- Heavy Brigade, Forward Maneuver,⁹ Movement to Contact
- Heavy Brigade, Forward Maneuver, Offense
- Heavy Brigade, Forward Maneuver, Defense
- Heavy Brigade, Brigade Support Area, Movement to Contact
- Heavy Brigade, Brigade Support Area, Offense and Defense
- Light Infantry Brigade, Defense
- Support Brigade

Units are configured as for an out-of-area operation. They are relatively dispersed and are assumed to be operating in flat, open terrain.

Protection is available in both AMedP-8 Nuclear and Chemical. Although tactical scenarios contain vehicles, tents, and other forms of shelter, unlike AMedP-8 Nuclear, AMedP-8 Chemical disregards these forms of collective protection. Instead, it assumes that all targeted personnel are unsheltered, and individual protection is available. Similar to AMedP-8 Nuclear, AMedP-8 Chemical assumes that personnel do not receive pre-exposure prophylaxis or post-exposure treatment.

⁹ “Forward Maneuver” and “Forward Maneuver Battalions” are used interchangeably in this document and its appendices.

2. Attack Details

Casualty estimates presented in AMedP-8 Chemical are for single attacks occurring individually in a given scenario (similar to AMedP-8 Nuclear); however, it ventures further to consider attacks of varying intensity (light, moderate, heavy) for a given weapon type and scenario. Determination of aimpoints differs from AMedP-8 Nuclear: aimpoints are optimized to produce the greatest number of casualties entering the medical system within the targeted sub-operational area (battalion or brigade). Furthermore, casualty estimates include personnel located within both the targeted and downwind hazard areas of the operational area or brigade.

Similar to AMedP-8 Nuclear, AMedP-8 Chemical presents “worst-case” casualty estimates. Thus, attack parameters are based on assumptions that maximize the number of casualties and the resulting workload for the medical system: all scenarios are considered both with and without the availability of individual physical protection; personnel do not receive medical pre-exposure prophylaxis or post-exposure medical care; target locations are selected to maximize the number of personnel that are expected to enter the medical system as patients; and, attacks occur under worst-case meteorological conditions. These assumptions are discussed further in Section II.B.

3. Methodology

As in AMedP-8 Nuclear, AMedP-8 Chemical casualty estimates are derived from the evaluation of effects of single attacks against static troop formations. The estimates begin with calculation of the amount of agent to which individuals within the troop formation are exposed as a result of an attack. Then the effects of the attacks are characterized by the signs and symptoms experienced by individuals given their level of exposure and resulting degradation of their performance over time.

4. Presentation Format

As in AMedP-8 Nuclear, AMedP-8 Chemical provides estimates of the number of personnel with various types and severity of injury at specified times after exposure, the performance level of unit personnel over time, and the number of fatalities over time.

To facilitate use of AMedP-8 Chemical, the organization and structure of AMedP-8 Nuclear was retained to the fullest extent possible. The first three sections provide introductory and background material, an overview of the methodologies used, and a discussion of how to use the casualty tables presented in subsequent sections. The remaining sections provide casualty estimates, organized by tactical scenario. Each section in turn comprises subsections organized by agent and contains estimates for all munitions/attack intensity combinations.

B. INPUTS AND ASSUMPTIONS SPECIFIC TO AMedP-8 CHEMICAL

Chemical warfare attacks differ from battlefield nuclear warfare attacks in several aspects. A wide variety of chemical agents can be used in warfare, each of which has unique dissemination characteristics and human effects. Most conventional munitions can be modified to deliver chemical agent, and the means of delivery will greatly influence the effects of the attack. Prevailing meteorological conditions will significantly influence the size of the area affected by the attack, the concentration of agent within the attack area, and the persistence of the agent.

In developing AMedP-8 Chemical, agents, delivery systems, and attack intensities were chosen to represent the range of effects. Meteorological conditions were selected to maximize the effective attack area for a given agent/delivery system combination. Estimates consider two levels of protection: unavailable and available.

1. Agents

AMedP-8 Chemical considers three agents: the persistent nerve agent VX, the non-persistent nerve agent GB (also known as sarin), and the blister agent HD (also known as distilled mustard).

Persistent chemical agents have low volatility and evaporate slowly. Once disseminated, the bulk of the agent remains in liquid form, falling to the ground as droplets, where it will remain for extended periods of time. Exposure to the agent typically occurs through contact with the skin.

Non-persistent agents are high-volatility chemicals, evaporating rapidly. Once disseminated, the bulk of agent is in gaseous form. Exposure to the agent typically occurs via inhalation of vapor, although chemical vapor can be absorbed through exposed skin and eyes as well.

The primary physiological effect of nerve agents is the system-wide buildup of acetylcholine at nerve-nerve or nerve-muscle junctions, causing toxicity within minutes to hours after exposure. At lower doses, nerve agent exposure is associated with eye pain, blurred vision, headache, chest tightness, restricted breathing, nausea, and vomiting. At higher doses, nerve agent exposure is associated with tremors, convulsions, paralysis, respiratory failure, and death.

Blister agents cause inflammation, blistering, and general tissue destruction, the locus and severity of which depend on the quantity and route of exposure. The blister agent considered here, HD, is of moderate volatility; its dissemination would result in significant hazard from both liquid and vapor. Inhalation of HD vapor can damage the respiratory system, with symptoms

ranging from nausea, dry cough, and sore throat at low doses to severe chest pain, choking, and death at high doses. Exposure to HD vapor or liquid will cause burning and swelling of the eyes, and blisters and ulceration of the skin. At high doses, whole body skin effects are very severe, leading to intoxication and possibly death.

2. Munitions and Attack Intensities

Most conventional explosive munitions can be modified to disseminate chemical agents. To represent the range of possible chemical warfare casualties, AMedP-8 Chemical considers a variety of munitions; for each type of munitions, it considers effects from light, moderate, and heavy intensities of attack. Table II-1 summarizes the munitions and attack intensities considered in AMedP-8 Chemical. Further information on munitions and attack details can be found in Appendix I.

Table II-1. Munitions and Attack Intensity Combinations

Attack Intensity	Munitions		
	Artillery	Bombs	Missiles
Light	152mm Artillery 18 rounds	250kg Bombs 2 rounds	250kg TBM 1 round
Moderate	122mm Rockets 240 rounds	250kg Bombs 12 rounds	500kg TBM 2 rounds
Heavy	122mm Rockets 720 rounds	250kg Bombs 24 rounds	500kg TBM 4 rounds

3. Meteorology

The casualties resulting from any given chemical agent attack can vary significantly, depending on the meteorological conditions prevailing at the time of attack. The casualty estimates presented in AMedP-8 Chemical assume worst-case meteorological conditions, defined as those that would result in the largest geographic area covered by agent concentrations greater than or equal to incapacitating levels.

The meteorological conditions that affect agent dissemination include temperature, cloud cover, atmospheric stability, and wind speed. The worst-case values for any of these conditions may vary by agent and delivery system because of differences in volatility, payload, height of burst, and area of impact. Therefore, the development of AMedP-8 Chemical required an assessment of meteorological conditions specific to the agent/munitions/attack intensity combination considered. SAIC performed this assessment and their methodology was not

available for documentation.¹⁰ Section III.A.4 describes input parameters for meteorology assessment. Appendix I Section C.3 contains the meteorological data used for the production of AMedP-8 Chemical.

4. Physical Protection

For each scenario, AMedP-8 Chemical provides casualty estimates for both protection unavailable and protection available cases. In all scenarios, personnel are assumed to be engaged in extra-vehicular activities and unsheltered at the time of attack. Furthermore, all personnel are assumed to be wearing standard battledress uniform at the initiation of attack. The effects of decontamination are not considered.

In the protection unavailable case, personnel are assumed to be exposed to the effects of agent in both vapor and liquid forms through the following routes of entry: skin, eyes, and respiratory tract. The impact of duration is not explicitly considered here or in the protection available case. Section III.B describes the methodology for calculating exposure in the protection unavailable case.

In the protection available case, AMedP-8 considers the use of individual protective equipment to mitigate or negate the effects of chemical agents. Individual protective equipment includes a protective mask and hood, overgarment, overboots, and gloves. Note that casualty estimates disregard the existence of collective protection, such as vehicles and tents. In the protection available case, it is assumed that immediately following the attack, all personnel don the mask within 1 minute and the full protective ensemble within 9 minutes. Personnel are exposed to the agent in both liquid and vapor forms through skin, eyes, and the respiratory tract; however, this exposure occurs only for the time it takes to don a protective mask, assumed to be 1 minute. At this point, individuals are exposed only to the skin effects of agent until they don the rest of their protective equipment, a process that is assumed to take a total of 9 minutes. Thus, respiratory exposures occur for 1 minute, and body surface exposures continue for a total of 9 minutes. Section III.B describes the methodology for calculating exposure in the protection available case.

The assumptions made about the time it takes to don protective equipment are derived from individual skill set standards and assume that all forces are trained to meet these standards. The estimates are conservative since they assume all personnel utilize the maximum amount of time to don equipment. If a soldier has ready access to his equipment, it may only take a few

¹⁰ SAIC performed an assessment of worst-case meteorological conditions specific to the agent/munitions/attack intensity combinations considered in AMedP-8 Chemical. Thus, SAIC generated separate meteorological input files for each combination, and IDA used these values to develop chemical exposure estimates. Further information was not available in order to document the SAIC methodology.

seconds to put on a mask and fewer than 9 minutes to put on the rest of his ensemble. At the same time, these casualty estimates optimistically assume that protective equipment fits properly and provides complete protection, and that all soldiers have their equipment available and don it correctly. In addition, estimates don't consider performance decrement not caused by the chemical agent, such as heat stress, fatigue, and visual decrement. On balance, these assumptions should provide reasonable approximation of the effects of protective equipment.

5. Casualty Estimation Methodology

At the general level, the chemical and nuclear volumes of AMedP-8 used similar casualty estimation methodologies. Specific combinations of tactical unit and type of attack (threat agent, delivery system, and attack intensity) give rise to the levels of agent exposure among individuals within the unit. Then the set of individual exposures provide the basis for determining the fates of individuals in the unit, in the absence of medical treatment: if and when they become casualties, the nature and severity of their illnesses, the time over which they are ill, and whether they recover or die. These data are then tabulated to portray the number of casualties in the unit.

Because attacks with nuclear and chemical weapons are quite different, however, the nuclear and chemical volumes of AMedP-8 differed in their use of the specific analytical tools for calculating effects. The developers of the chemical volume used the Naval Surface Warfare Center's Vapor, Liquid, and Solid Tracking Model (VLSTRACK), version 1.6.1 to model the dispersion of chemical agent, in both liquid and vapor forms.¹¹ Then, they combined the output of VLSTRACK with a three-dimensional (x, y, and time) representation of a tactical unit within the BioStrike model (developed by the Institute for Defense Analyses) to determine individual exposures to agents.¹² The U.S. Defense Nuclear Agency Improved Casualty Estimation/Intermediate Dosage Program (DICE/IDP)¹³ methodology used these exposures to estimate casualty numbers, illness severity, and performance levels over time (see Section IV for a detailed discussion of this methodology).

¹¹ Bauer, Timothy J. and Roger L. Gibbs, 1995.

¹² Flythe, 2000. The use of the BioStrike model requires agent dispersion data reported in a specific format; to streamline the methodology, IDA developed a variant of VLSTRACK, called GRIDGEN, to report the outputs of VLSTRACK in a BioStrike-compatible format.

¹³ McClellan et al., 1998.

III. CHEMICAL EXPOSURE ESTIMATION METHODOLOGY

The casualty estimation approach used to develop AMedP-8 Chemical begins with determining agent exposure at the level of the individual or group of individuals (or icon, see below) based on their location within the scenario and with respect to the attack. This section describes the methodology used to estimate chemical exposure for icons in each scenario. Section IV proceeds to discuss the methodology for using these exposure estimates to determine performance degradation and casualty estimates.

Calculating agent exposure at the individual level for all scenarios considered in AMedP-8 Chemical requires various types of input data; some data are collected as basic inputs and some are calculated in intermediate steps. Figure III-1 describes the process by which individual agent exposures are calculated for the AMedP-8 Chemical; input data and output data are shown as boxes, while analytical tools are shown as ovals.

A. INPUTS FOR CHEMICAL EXPOSURE ESTIMATION

As shown in Figure III-1, the calculation of individual chemical agent exposures in any given scenario requires several pieces of information, including the tactical arrangement of units on the battlefield (Troop Data), agent data, delivery system and munitions data (Munitions Data), and meteorological data.

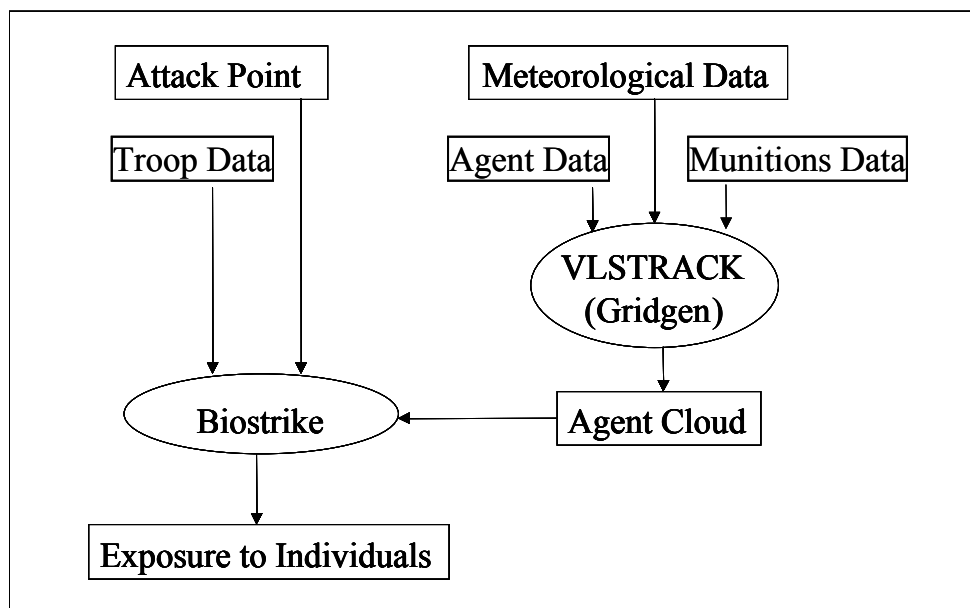


Figure III-1. Calculation Process of Individual Exposures

1. Tactical Arrangement of Units on Battlefield

AMedP-8 Chemical relies on scenario-based casualty estimation. Scenarios consist of a tactical arrangement of units on the battlefield, based on doctrinal composition.¹⁴ Within each scenario, the smallest tactical units or systems are called icons, each consisting of one or several personnel (or crew). The seven tactical scenarios listed in Section II.A were used in AMedP-8. AMedP-8 scenarios are comprised of a combination of tactical scenario, agent (GB, VX, or HD), weapon type (MRLS, bombs, TBMs), attack intensity (heavy, moderate, or light), and posture (protection unavailable, or protection available). Scenarios are organized by brigade and are discussed in greater detail below. For each scenario, troop data files used as BioStrike inputs are further described in Appendix I.

a. Heavy Brigade

The Heavy Brigade consists of six battalions and other assigned elements: the battalions are two mechanized infantries, one armor, one self-propelled artillery, one mechanized engineer, and one support battalion; assigned elements include air defense, intelligence, military police, and smoke generators. The Heavy Brigade is depicted performing three missions: movement to contact, offense and defense. The formation and separation among units and systems varies in each of the tactical missions.

The Heavy Brigade personnel manning level used in this document is 4,042 personnel, which includes supporting units such as air defense. There are 443 armored vehicles, 778 wheeled vehicles (trucks), and 9 motorcycles. Of the armored vehicles, 76 are main battle tanks or their derivatives; the remainder are armored fighting vehicles, howitzers, mortar carriers, etc. Within the truck category, there are 252 light utility (equivalent to the US HMMWV), 224 5-ton cargo, and 144 8-ton cargo. In the scenarios described below, trucks predominate in the brigade support area and armored vehicles predominate in the maneuver area. All vehicle mixes in the targets were assigned as they would be in the appropriate combat situation.

The area occupied by the Brigade is large relative to the area coverage of the chemical weapons. Additionally, casualty estimates do not account for protection provided by trucks and other vehicles; personnel are assumed to be unsheltered at the time of attack (see Section II.A). Casualties are estimated for different areas of the brigade targeted: the maneuver battalions or the brigade support area.

Maneuver battalions are targeted in the scenarios:

- Heavy Brigade, Forward Maneuver, Movement to Contact
- Heavy Brigade, Forward Maneuver, Offense

¹⁴ Please see Appendix H for tables of organization and equipment (TOEs) referenced to develop the scenarios.

- Heavy Brigade, Forward Maneuver, Defense

The brigade support area is targeted in the scenarios:

- Heavy Brigade, Brigade Support Area, Movement to Contact
- Heavy Brigade, Brigade Support Area, Offense and Defense

The Heavy Brigade and its tactical scenarios are briefly described here; further details and relevant data can be found in Appendices A through E. Appendix A pertains to the “Heavy Brigade, Forward Maneuver, Movement to Contact” scenario. Table A1 describes the brigade, at the icon level of detail, in tactical arrangement; Table A2 provides similar information arranged according to icon number. These tables display all icons in the heavy brigade and are not limited to those targeted in this scenario. Figure A1 provides a tactical layout of these icons, labeled by task force; included are the Brigade Support Area, Mechanized Infantry Battalion 1, Mechanized Infantry Battalion 2, and the Tank Battalion Task Forces. Figure A2 depicts the same tactical layout as Figure A1, but on a scale (x, 0—30 km; y, 0—60 km) standardized throughout the seven scenarios, enabling comparison of area coverage of this tactical scenario with the others.

The Forward Maneuver Task Forces are targeted for attack in the scenario “Heavy Brigade, Forward Maneuver, Movement to Contact,” while the Brigade Support Area Task Force is targeted in the scenario “Heavy Brigade, Brigade Support Area, Movement to Contact” (see Appendix B). The Tank Battalion Task Force is targeted in the scenarios “Heavy Brigade, Forward Maneuver, Offense” (see Appendix C), and “Heavy Brigade, Forward Maneuver, Defense” (see Appendix D), but the Brigade Support Area Task Force is targeted in the scenario “Heavy Brigade, Brigade Support Area, Offense and Defense” (see Appendix E). The process for determining aimpoints for attack is described in Section III.B.2. The tactical scenarios of the Heavy Brigade are detailed below.

Heavy Brigade, Forward Maneuver, Movement to Contact

The Brigade is deployed with two battalion task forces moving on line; the third task force follows, deployed on line across the width of the brigade (see Figure A1). The support elements follow next. Scouts, ground surveillance radar, and some combat engineers are leading forward of the two task forces on line. The direct support artillery battalion has one battery traveling with each task force. The direct support engineer battalion has one company moving with each task force. Air defense and smoke generator assets are located with each task force and the support formation. Within this formation, all companies and batteries are traveling deployed in line.

Appendix A contains details on unit description and agent exposure effects for this scenario. Figures A2 and A3 present the tactical layout of the forward maneuver battalions targeted in this scenario.

Heavy Brigade, Forward Maneuver, Offense

The Heavy Brigade in the offense comprises three battalion task forces on line and a brigade support area. This array presents four basic target areas (three battalion task forces with support and a brigade support area), three of which are essentially identical. The battalions are well-dispersed and present individual targets within the brigade area. Thus, the detailed casualty assessment is presented for a battalion task force and the brigade support area. Appendix C presents Figures C1 and C2 (standardized scale), schematics of the unit deployment. The maneuver force target comprises three company teams on line, with scouts on both flanks. Behind the teams, the battalion mortars are deployed in two sections. A direct support artillery battery is deployed in three groups—two firing platoons and a battery headquarters. An engineer company is also in direct support. The majority of the engineers are maintained in the company formation. The battalion retains a reserve company team and a separate combat trains area. There is a main battalion command post and a tactical command post. The tactical command post is more forward. The battalion anti-armor company is divided among the reserve, center, and right flank teams as anti-armor platoons. Air defense and smoke generator assets are integrated into elements of the formation. Appendix C contains detailed unit descriptions and agent exposure estimates for this scenario.

Heavy Brigade, Forward Maneuver, Defense

As deployed for defense, the brigade again provides four elements that may be targeted: three battalion task forces and a brigade support area; a battalion-sized reserve is not maintained in this situation. As discussed above, this layout provides two basic formations for casualty estimation, targeting a maneuver unit or the brigade support area. This section describes the maneuver unit, and Appendix D provides a schematic, Figure D1; the discussion below describes the brigade support area. In the defense, company teams are not formed; therefore, the armor company is maintained. The battalion is deployed with scouts and ground surveillance radars forward of the main defensive positions. Four companies are deployed on line and one is maintained in reserve. The anti-armor company is not attached out but employed as one of the companies in the main defensive position. The armor company is designated as the reserve. The direct support artillery battery is deployed as two platoons with the battery headquarters collocated with one of the platoons. The battalion mortar platoon is divided into two sections. There is a main command post, a tactical battalion command post, a combat train area, and a

combat engineer company. Air defense and smoke generator assets are integrated into elements of the formation. Appendix D contains details on unit description and chemical agent exposure estimates for icons in this scenario.

Heavy Brigade, Brigade Support Area, Movement to Contact

In movement to contact, elements that constitute the brigade support area are moving in convoy behind the third task force of the brigade, as shown in Appendix B, Figure B1. These elements consist of the brigade support battalion, the logistical elements of all the maneuver battalions, the brigade main command post, and the support battalion command post. Air defense assets are integrated into the formation. Most of the units are deployed in multiple parallel columns.

Appendix B contains details on unit description and agent exposure estimates for the Heavy Brigade, Brigade Support Area, Movement to Contact. Note that corresponding icons (in terms of function) are assigned different icon numbers in movement to contact, compared with offense and defense.

Heavy Brigade, Brigade Support Area, Offense and Defense

The brigade support area was assumed to be the same for both the offense and defense missions. The support area is established along a supply route, and units are deployed as shown in Appendix E, Figure E1. The bold outline in these figures indicates the unit boundaries. The support area units include logistical elements for food, maintenance, supply, limited ammunition, transportation, and medical. Also located in the brigade support area are logistical elements of the brigade's organic maneuver battalions. These are two mechanized infantry, one armor, one mechanized engineer, and one self-propelled artillery battalions. The brigade rear headquarters and support battalion headquarters are also located here. An air defense platoon and company headquarters provide point defense from air attack. Appendix E contains details on unit description and agent exposure estimates, for the Heavy Brigade, Brigade Support Area, in Offense and Defense. Note that corresponding icons (in terms of function) are assigned different icon numbers in Movement to Contact, compared with Offense and Defense.

b. Support Brigade

The Support Brigade is patterned after a combat service support formation that could support at least one heavy division. The units, listed below, are stationary and deployed along a main supply route (see Appendix F, Figure F1):

- Supply and Service Company
- Heavy Maintenance Company

- Light Maintenance Company
- Missile Maintenance Company
- Direct Support Maintenance Company
- Direct Support Supply Company
- Field Service Company
- Two Truck Companies
- Medical Company
- Direct Support Ammunition Company
- Chemical defense, signal, intelligence, and military police units of platoon size
- Four headquarters elements
- Air defense assets are integrated with the units for point defense.

The Support Brigade has a personnel strength of 2,314 divided equally among those in the open, in tents, and in vans. There are seventy repair or shop vans in which personnel could be working. The deployment of the support brigade is assumed to be the same, whether offense or defense. Appendix F contains details on unit description and exposure estimates for icons in the Support Brigade. Note that casualty estimates are based on the assumption that all personnel are involved in extravehicular activities at the time of attack. Thus, collective protection that would be afforded by vehicles and tents was not considered in AMedP-8 Chemical.

c. Light Infantry Brigade

The Light Infantry Brigade, which comprises three infantry battalions, an artillery battalion, and a support battalion, is patterned to emulate an airborne or other light, rapidly deployable infantry brigade; its assigned mission is perimeter defense of an airfield. The brigade is deployed with the three battalions forming a 360-degree defense, as if protecting an aerial port of debarkation in preparation for the receipt of follow-on forces (see Appendix G, Figures G1 and G2). Each infantry battalion occupies a portion of the perimeter; a company reserve is maintained in each battalion area. The battalion logistical elements are consolidated with the brigade support battalion. This brigade has a strength of 3,454 personnel. Appendix G contains details on unit description and agent exposure estimates for the Light Infantry Brigade. Although the unit descriptions in Appendix G indicate that foxholes are available for a fraction of the personnel, casualty estimates for the Light Infantry Brigade assume all personnel are unsheltered at the time of attack.

2. Agent Data

As shown earlier in Figure III-1, agent characterization data is one of the inputs into VLSTRACK. AMedP-8 Chemical calculations used the default set of agent data provided with

the VLSTRACK model to characterize chemical agents.¹⁵ VLSTRACK uses the following agent characteristics: bulk density, dissemination efficiency, median effective dose, probit slope, freezing temperature, molecular weight, volatility coefficients, heat of vaporization, viscosity, surface tension, agent vapor diffusivity in air, and droplet spread factor. Appendix I, Table I-9, defines the chemical agent characteristics used by VLSTRACK, and Table I-10 presents the agent data.

3. Delivery System and Munitions Data

As with agent data, the calculations made for AMedP-8 Chemical used the default set of delivery system and munitions data provided with the VLSTRACK model (see Figure III-1).¹⁶ The model uses the following delivery system and munitions characteristics: fill weight, height of burst, firing rate, number of delivery systems in attack, downrange and cross-range target standard deviations, droplet mass-median diameter, droplet distribution sigma, line source length, line source fall angle, and cloud sigma. Appendix I, Table I-12, defines the delivery system and munitions characteristics used by VLSTRACK, and Table I-11 presents the data used to create AMedP-8 Chemical.

4. Meteorological Data

As shown in Figure III-1, meteorological data is one of the inputs into VLSTRACK. Inputs include data for wind direction, wind speed, air temperature, and degree of cloud cover. Appendix I, Table I-13, defines the meteorology characteristics used by VLSTRACK, and Table I-14 presents the meteorology data used for each munitions/attack intensity combination.

B. INTERMEDIATE CALCULATIONS

As shown in Figure III-1, the AMedP-8 methodology uses the input data on tactical formation, agent characteristics, munitions characteristics, and meteorology in a series of intermediate calculations. These calculations generate an agent “cloud” and determine the aimpoints to generate that cloud, for use in subsequent calculations.

1. Chemical Agent Clouds

The chemical agent clouds used in the AMedP-8 methodology are approximations of the downwind agent hazard resulting from a release of chemical agent, expressed in planar dimensions over time. As noted in Section II.B.5, the VLSTRACK model, version 1.6.1, was

¹⁵ Chemical agent data are captured in the VLSTRACK input file VLSAGN.PAR.

¹⁶ Munitions data are captured in the VLSTRACK input file VLSMUN.PAR.

used to generate chemical agent clouds for AMedP-8.¹⁷ The model considers all the agent, munitions, and meteorology data described above.

Release of chemical agents typically causes significant hazards from both vapor and liquid, and the transport and dispersion of each is significantly different. Thus, VLSTRACK generates separate clouds for vapor and liquid forms of agent. The model considers secondary evaporation of liquid on the ground in addition to the evaporation of the liquid in the cloud. The secondary evaporation is approximated in the vapor cloud. The cumulative doses received by personnel over time from both liquid and vapor hazards are considered in subsequent casualty calculations.

During the development of AMedP-8 Chemical, both vapor and liquid clouds were created for each combination of agent, delivery system, and attack intensity. However, the GB liquid clouds were negligible in all cases and were not considered further in the development of casualty estimates; for all delivery system and meteorology combinations considered, vapor was the only form of the agent GB to produce hazards above the lowest level possible in VLSTRACK.

Agent concentration is reported as a two-dimensional grid for each of a series of time steps. For AMedP-8 Chemical, the grid has 201 points on each side, the maximum allowed by VLSTRACK. In addition, AMedP-8 agent clouds have self-adjusting grid sizes, meaning the grid size changes over time to encompass the hazard as it grows after release and then shrinks as it dissipates.

As noted, the use of the BioStrike model requires agent cloud data reported in a specific format; to streamline the methodology, IDA developed a version of VLSTRACK, called Gridgen, to report the outputs of VLSTRACK in a BioStrike-compatible format. The Gridgen model also manages time steps slightly differently than VLSTRACK. VLSTRACK Version 1.6.1 allows users to specify meteorological data for up to 24 time periods of uniform duration, which may be as short as 1 minute or as long as 1 hour. It will report up to 60 outputs per time period, but the minimum reporting interval is 1 minute. As with time periods, reporting intervals

¹⁷ The VLSTRACK model is capable of providing three types of output: deposition, dosage, and vapor/droplet/particle concentration. Deposition output provides estimates in terms of mg/m^2 on the ground. Dosage output provides estimates in terms of $\text{mg}\cdot\text{min}/\text{m}^3$. Concentration output is in terms of part/m^3 of airborne droplets or particles and was not considered in developing AMedP-8. VLSTRACK can provide output in four dimensions—three spatial dimensions and time. In the variant of VLSTRACK used to develop AMedP-8, the vertical dimension was restricted to a single point, with output provided for x and y locations on a plane intersecting the vertical dimension. For deposition, this output was calculated at ground level, or a height of 0 meters; for dosage output, this was calculated at an approximate breathing height of 2 meters.

are of uniform duration. The GRIDGEN model, on the other hand, allows users to specify non-uniform time steps, using the scheme illustrated in Figure III-2.

NUMBER OF DATA TIME PERIODS								
12								
NUMBER OF TIME STEPS, BY DATA TIME PERIOD (1 THROUGH NVTIMP, RESPECTIVELY)								
12	24	12	12	12	12	12	12	24
24	24	12						
TIME SPACING BETWEEN TIME STEPS, BY DATA TIME PERIOD (MINUTES)								
1.00	2.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00	5.00	5.00	5.00					

Figure III-2. Extract from GRIDGEN Special Inputs File Used For AMedP-8 Chemical

In this case, Gridgen uses 12 data time periods. The first comprises 12 time steps of 1-minute duration; the second, 24 time steps of 2-minute duration; the third, 12 time steps of 5-minute duration, and so on. The initial advantage of this scheme over the default approach used by VLSTRACK was that it allowed users to conserve computational time.¹⁸ Users could choose short, high-resolution, but computationally intense time steps at those points in the cloud evolution at which the chemical hazard is changing most rapidly—typically in the immediate aftermath of release—and switch to longer, lower-resolution time steps at other times where the hazard is changing more slowly.

VLSTRACK v.1.6.1 and IDA’s GRIDGEN adaptation of the model accepts the use of time varying meteorology in increments of 1 hour. Although IDA’s GRIDGEN adaptation of the model allows for meteorological data to be input in user-defined increments as small as 1 minute, meteorological data used to develop the chemical volume were input on an hourly basis.

2. Aimpoint Determination

The BioStrike model can be run in several modes, two of which were used extensively in the development of AMedP-8 Chemical. In Maximization mode, BioStrike will examine all possible attack points on a rectangular grid within a user-defined search area and output the point or set of points resulting in the largest number of expected casualties (to include prompt fatalities). This aimpoint can then be used as an input to BioStrike’s Evaluation mode, which will output the total number of expected casualties (to include prompt fatalities) and the amount of agent exposure at each troop location.

In the development of AMedP-8 Chemical, the BioStrike Maximization mode was used to determine the optimal aimpoint for each combination of agent, munitions, and attack intensity

¹⁸ At the time the AMedP-8 Chemical was developed, computational speed was such that single VLSTRACK runs frequently took several hours to complete. At present, the same runs would take just a few minutes.

for each tactical scenario. Separate aimpoint calculations were performed for the protection available and protection unavailable cases.

When using BioStrike Maximization mode, the user must define a search area for which the model evaluates all possible aimpoints along an x,y grid, with user-defined distances between grid points. The search area can be any polygonal shape, and the model can be directed to search either within or outside the boundaries of any of the polygon's sides. Because all the delivery systems considered in the chemical volume would typically be used in on-target attacks, the search area for the AMedP-8 aimpoint calculations was defined as the area contained within the outer physical boundaries of the tactical unit. In this case, the model was directed to evaluate aimpoints at 0.5 kilometer distances apart in both the x and y directions. The search boxes defined for each tactical scenario and the associated optimal aimpoints are shown in Figures III-3 through III-9. Each figure depicts the optimal aimpoints for all scenarios (combinations of agent, munitions, intensity, and protection) involving the given tactical scenario. The methodology for aimpoint optimization is explained in the following paragraphs. Note that for these figures, cross-wind and down-wind distances are in kilometers. The wind direction is set to point from north to south, parallel to the y -axis.

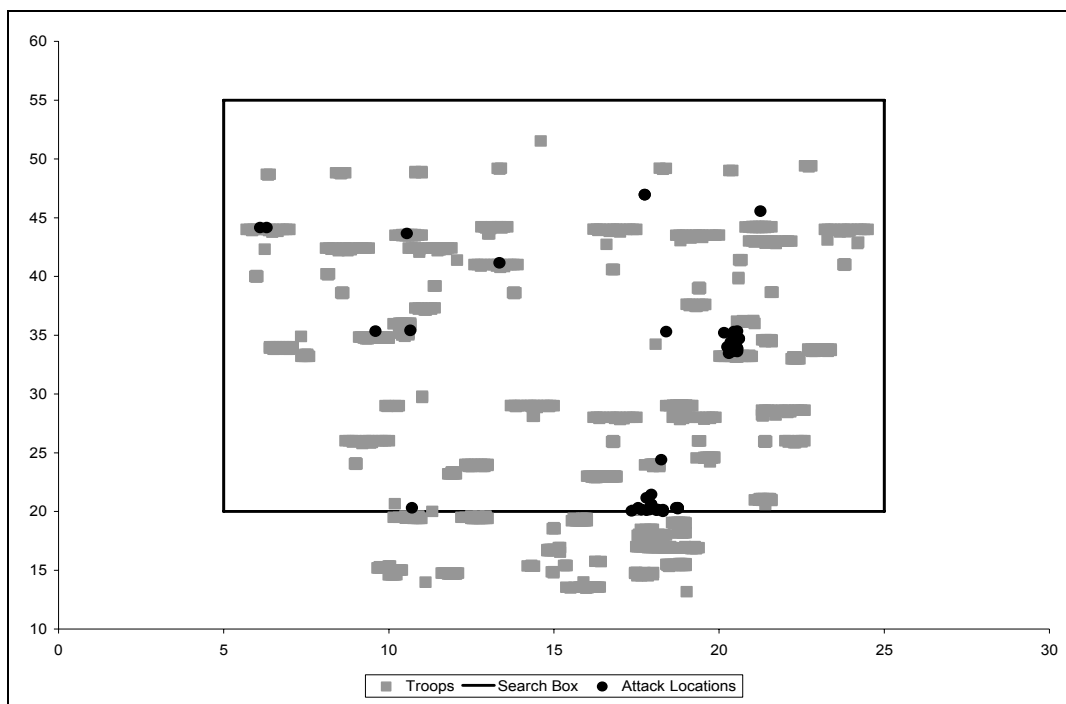


Figure III-3. Optimal Aimpoints: Heavy Brigade, Forward Maneuver, Movement to Contact

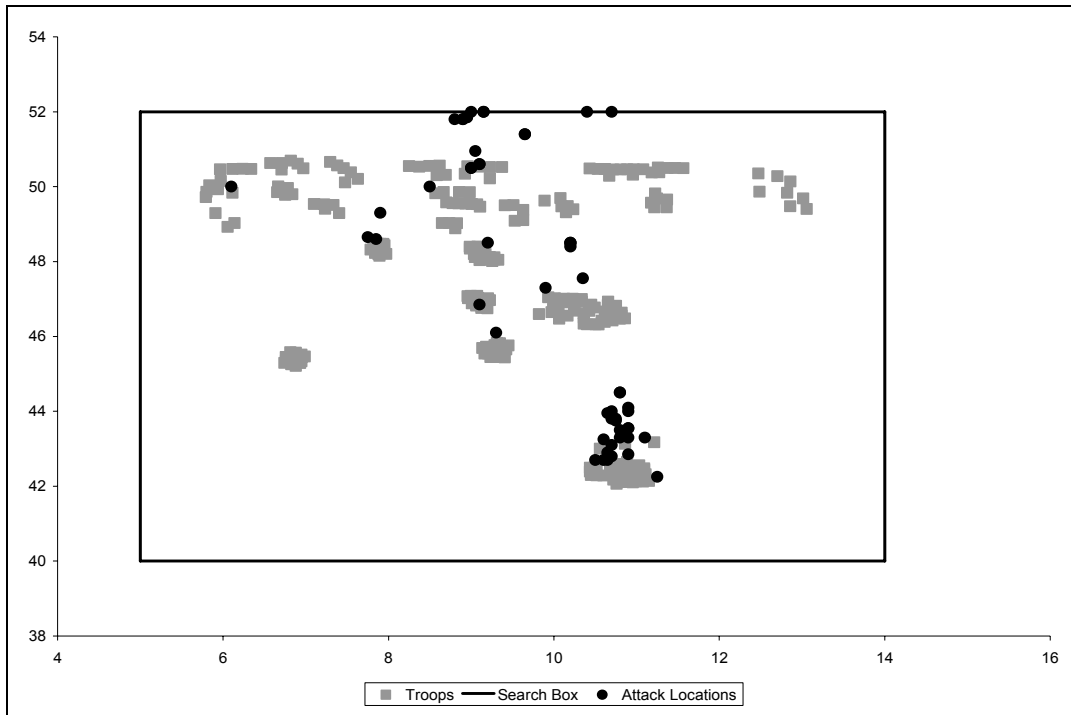


Figure III-4. Optimal Aimpoints: Heavy Brigade, Forward Maneuver, Offense

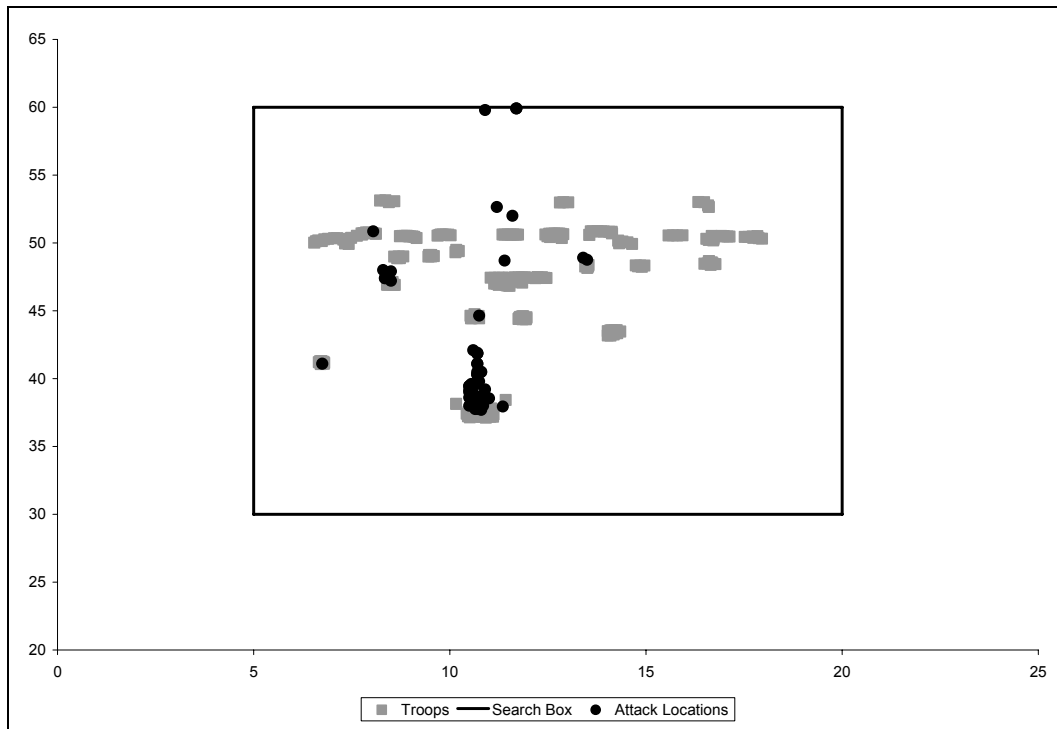


Figure III-5. Optimal Aimpoints: Heavy Brigade, Forward Maneuver, Defense

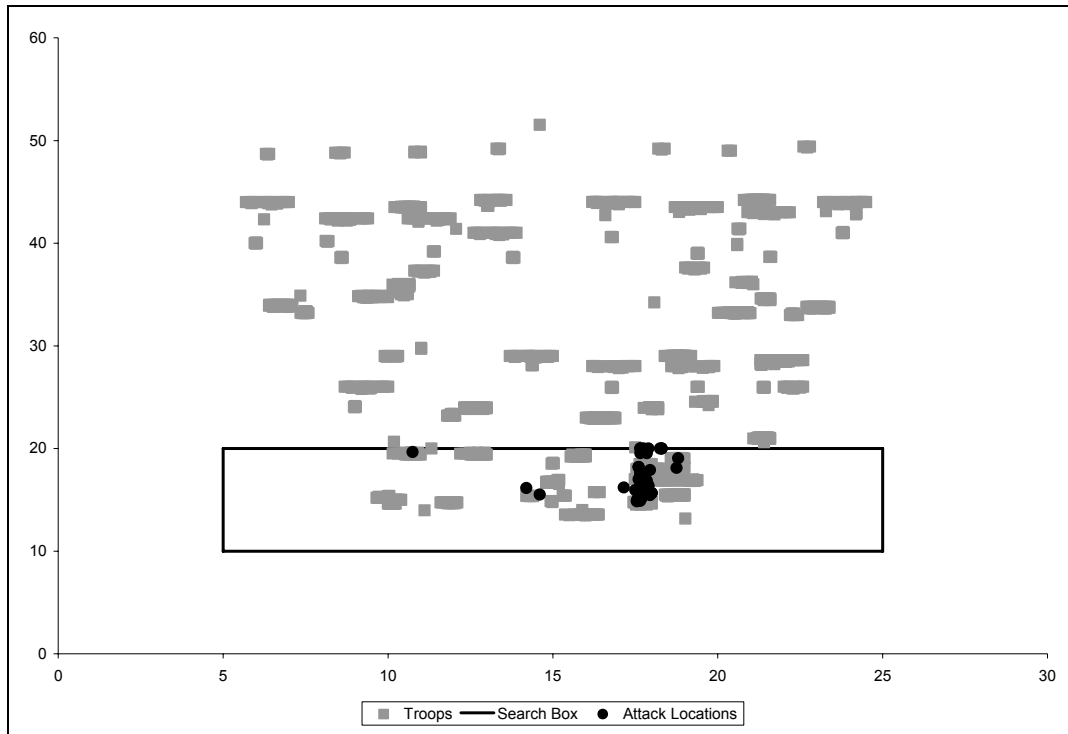


Figure III-6. Optimal Aimpoints: Heavy Brigade, Brigade Support Area, Movement to Contact

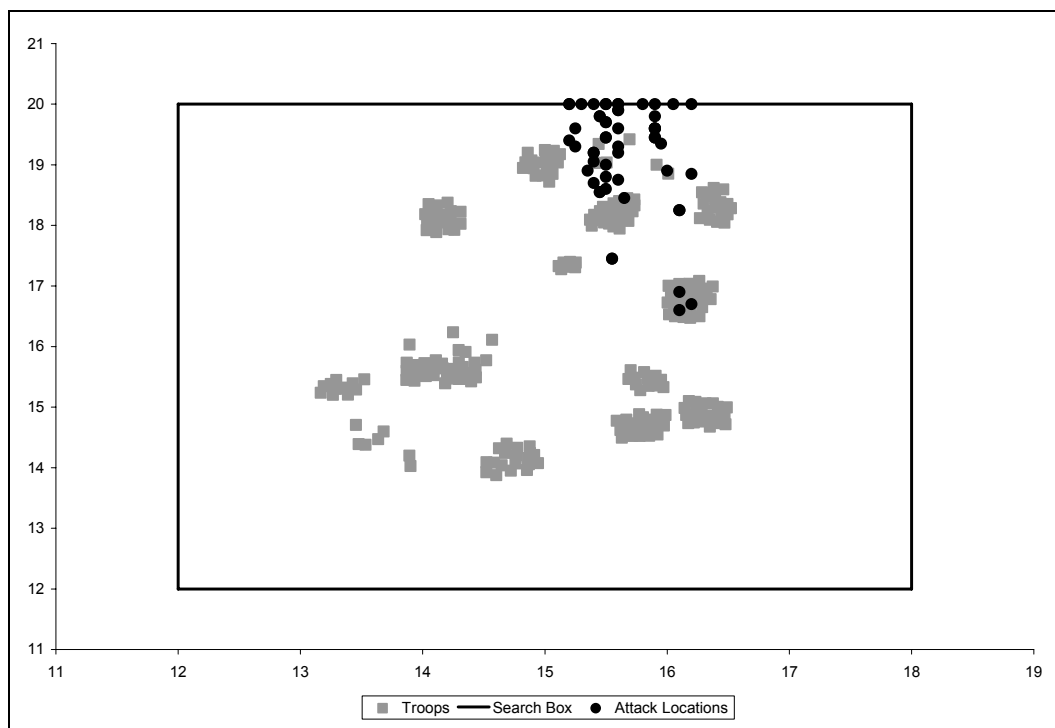


Figure III-7. Optimal Aimpoints: Heavy Brigade, Brigade Support Area, Offense and Defense

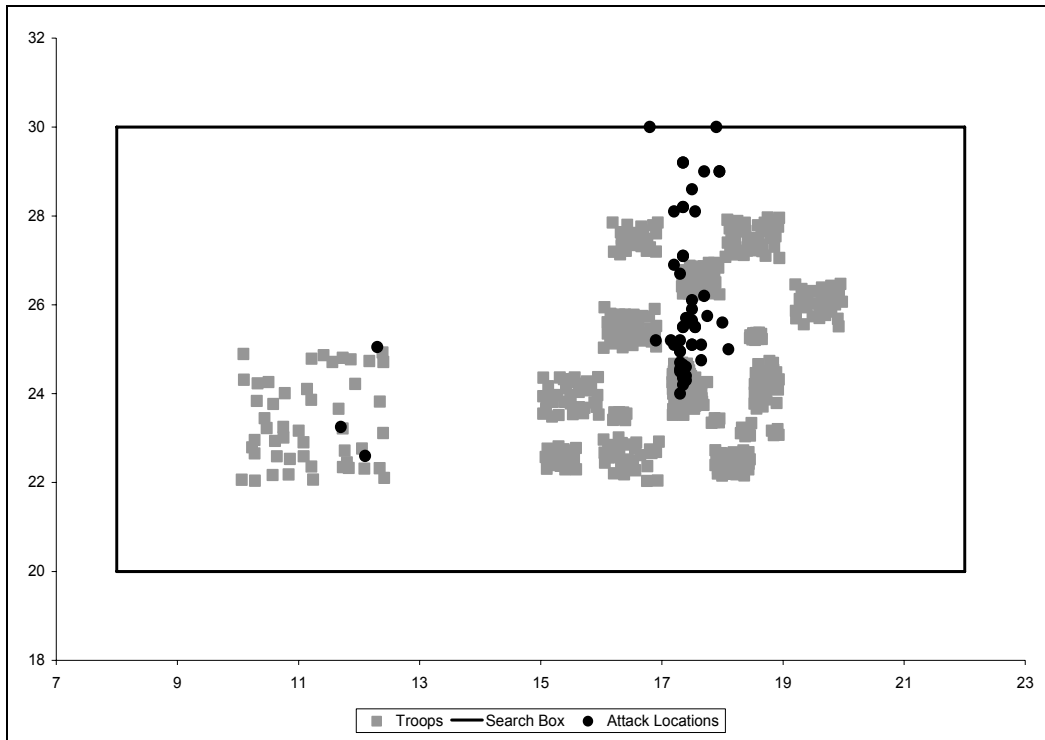


Figure III-8. Optimal Aimpoints: Support Brigade

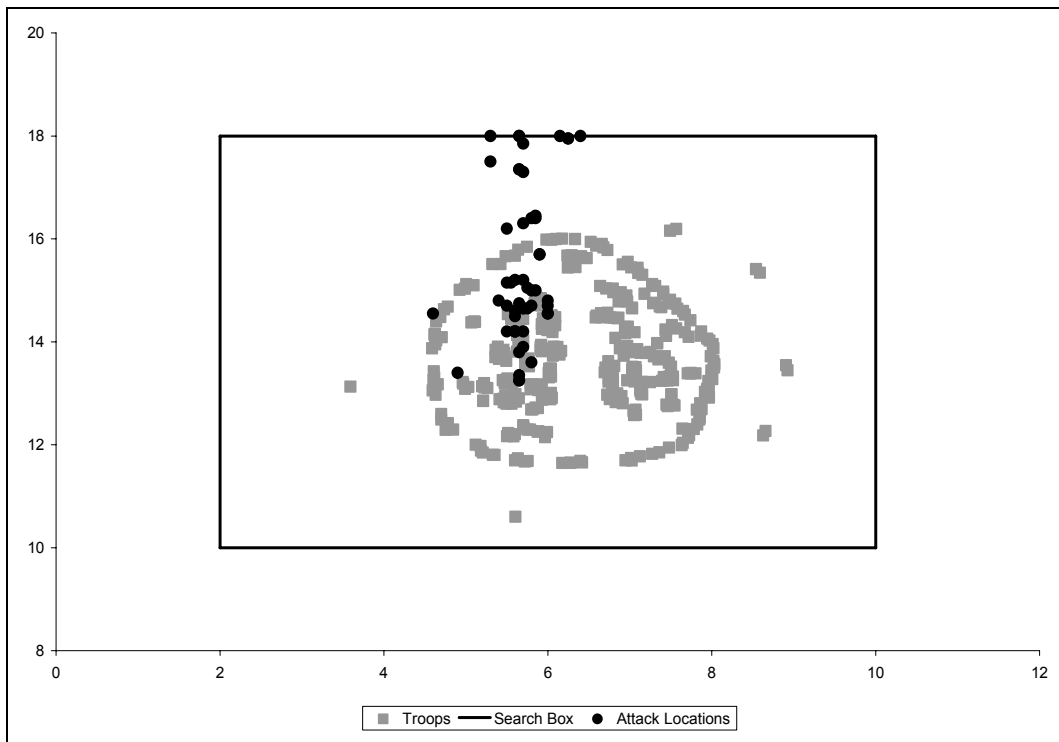


Figure III-9. Optimal Aimpoints: Light Infantry Brigade

For AMedP-8 Chemical, the objective for aimpoint optimization was to maximize the number of casualties, i.e., individuals entering the medical system, not necessarily the total number of casualties and fatalities. This meant that the modeling had to reflect a desire to maximize the number of individuals with exposures causing injurious but less-than-lethal effects. Simply maximizing total exposure could have resulted in proportionately large numbers of prompt fatalities who would never enter the medical system.¹⁹

To accomplish this, the first step was to determine the range of doses that would produce the desired level of effect. The selected ranges were based on the Injury Severity Categories established for each agent.²⁰ For the nerve agents GB and VX, the values associated with injury categories 3 through 5 were chosen. For HD, with its combination of ocular, skin, and respiratory effects, the selection was more difficult. The range that was chosen represented the low end of ocular effects on the one hand and the median lethal dose for respiratory effects on the other. Table III-1 provides the specific values used.

Table III-1. Dose Ranges Used to Determine Optimal Aimpoints

Agent	Lower Bound		Upper Bound	
	Value	Severity Category	Value	Severity Category
GB	3 mg-min/m ³	3	30 mg-min/m ³	5
VX	0.4 mg	3	4 mg	5
HD	5 mg-min/m ³	Ocular 2	1000 mg-min/m ³	Respiratory ~6/ LD ₅₀ Skin ~6

Note that in Table III-1, values for GB and HD are expressed as vapor dosage; for VX, they are expressed as liquid. BioStrike does not have the capability to evaluate the combined effects of vapor and liquid exposures in its Maximization mode. Therefore, for VX and HD releases, which typically have both a vapor and liquid component, the dominant component—the one with the greatest capability to generate injurious but less-than-lethal effect—was used to

¹⁹ BioStrike typically defines “optimal” aimpoints as those producing the maximum cumulative dosage in a scenario; this often correlates with producing the largest total number of casualties and prompt fatalities in that scenario. Expected casualties are calculated using a probit response methodology, where a given level of exposure is associated with a given probability of effect; the greater the exposure, the more likely it is to cause injury.

²⁰ See Section IV.B.1 for a discussion of Injury Severity Categories.

determine optimal aimpoints.²¹ For VX, this was the liquid component, while for HD and GB this was vapor.²²

The next step was to input these values into the BioStrike general data file. A dose response curve is generally represented in BioStrike as a series of exposure values with an associated probability of injury. The variables used are FILLAX, which defines exposure values, and FILLAY, which defines the injury probability associated with each value of FILLAX. A standard set of FILLAX and FILLAY values for GB, with an LD₅₀ of 70 mg-min/m³ and a probit slope of 12, would be as shown in Figure III-10.

'FILLAX(3,.)'	0.	44.80	51.05	54.74	57.38	59.56	61.50	63.30	65.01	66.68	68.33	...
'FILLAY(3,.,1)'	0.	.01	.05	.10	.15	.20	.25	.30	.35	.40	.45	...

Figure III-10. Standard BioStrike Inputs for GB

For any given calculated exposure, the probability of injury is calculated by interpolation. In the example above, an exposure of 70.00 mg-min/m³ has a 50% probability of lethality, while an exposure of 71.71 mg-min/m³ has a 55% probability of lethality. If BioStrike estimates an exposure of 70.68 mg-min/m³, it would calculate an associated 52% probability of lethality.

To determine optimal aimpoints for AMedP-8 Chemical, the FILLAX and FILLAY values were designed to exclude exposures outside the selected ranges, while treating all exposures within those ranges as equally valuable. The data set used to optimize GB exposures was as shown in Figure III-11.

'FILLAX(19,.)'	2.9999	3.	5.9999	6.	14.9999	15.	29.9999	30.
'FILLAY(19,.,3)'	0.	1.	1.	1.	1.	1.	1.	0.

Figure III-11. BioStrike Inputs for GB Used to Determine Optimal Aimpoints

As shown, this set of values would ignore all exposures less than 3 mg-min/m³ and greater than 29.9999 mg-min/m³, while counting every exposure in between as an expected casualty (i.e., patient in this analysis). When BioStrike is run in Maximization mode, it returns the aimpoint that generates the greatest number of individuals with exposures within the defined range.

²¹ Note that this strategy—consideration of merely the dominant component among vapor and liquid forms of agent—was used only in the aimpoint optimization process. However, during the casualty estimation process, both vapor and liquid components were considered (when present). See Section IV for the methodology used for casualty estimation calculations.

²² Due to the nature of the agent and delivery systems modeled in AMedP-8, attacks modeled for GB possessed only a negligible liquid component; thus, during both aimpoint optimization and casualty estimation, only vapor exposures were calculated.

This procedure was used to determine optimal aimpoints for both protection available and protection unavailable cases. Recall that for the protection available case, it is assumed that immediately following the attack, all personnel, having recognized the explosion of the incoming munitions, will don the mask within 1 minute and the full protective ensemble within 9 minutes. To implement this in the BioStrike Maximization mode, model run time was truncated at appropriate points, given the agent and its dominant form of exposure. As described above, only vapor exposure was considered in the GB and HD calculations during aimpoint optimization. Since ocular and respiratory injuries are the dominant effects of vapor exposure, exposures were calculated for only the first minute after attack in the GB and HD cases; after that point, masking would prevent further ocular or respiratory exposure. In the VX case, on the other hand, where only liquid exposure was considered, masking alone does not appreciably inhibit liquid skin exposures, so exposures were calculated for the first 9 minutes after attack; thereafter, the full protective ensemble was assumed to prevent further skin exposure. In the protection unavailable case, on the other hand, BioStrike calculated exposures for the duration of the agent hazard, including any secondary evaporation of agent, once again considering only the dominant form of exposure, as described above.²³

C. CALCULATION OF AGENT EXPOSURE

1. BioStrike Evaluation Mode

The final step in calculating individual agent exposures involves running the BioStrike model in its Evaluation mode. In this mode, the model simply overlays agent clouds on tactical scenarios at the previously determined optimal aimpoints and calculates the agent exposure at all grid points occupied by individuals in the tactical scenarios.

Typically, the model would then use the set of exposure values (FILLAX) and associated probability of casualty values (FILLAY) to determine the expected number of casualties at each grid point given the level of exposure and then sum them to determine the total number of expected casualties resulting from the postulated attack.

For AMedP-8 Chemical, however, BioStrike was used only to calculate exposure by grid point;²⁴ the effects of that exposure on personnel were evaluated separately, as described in Section IV. Since BioStrike does not typically include zero-value exposures in its output, the model needed to be adjusted to obtain exposures for all grid points. By setting all probability of casualty (FILLAY) values equal to one—even those associated with an exposure value

²³ Note that the methodology described here (especially the exposure calculations) only refers to aimpoint optimization calculations. Section IV, below, describes the methodology used for casualty estimation, including exposure and equivalent dose calculations.

²⁴ For AMedP-8 Chemical, grid point numbers correspond to icon numbers.

(FILLAX) of zero—BioStrike then reported exposure for all occupied grid-points in the scenario.²⁵

Separate BioStrike runs were conducted for each combination of tactical scenario, agent, delivery system, attack intensity, and protection status. In addition, for HD and VX, separate runs were conducted for both vapor and liquid clouds.

2. BioStrike Output Format

The BioStrike model output is reported in a flat text file. This output can take a variety of forms; for AMedP-8, it was set up to report grid point number, grid point x,y reference, fractional casualty rate, expected casualties, and exposure for all grid points in a given tactical scenario. Figure III-12 provides an example of the output generated for AMedP-8, in this case a portion of the results for a moderate-intensity GB artillery/MRLs attack against forward maneuver units of a heavy brigade on offense. Appendix M contains further details on processing of BioStrike output data.

In the sample output shown, the fractional casualty rate is equal to one because all values for FILLAY are equal to one. The number of casualties, therefore, is equal to the number of individuals located at the associated grid point. Note that the titles “Fractional Casualties” and “Number of Casualties” can be misleading in this output format; since the status of all occupied grid positions is reported, even personnel with vapor exposures of 0.0000E+0 are listed as ‘Casualties’ (see Section IV.C for a discussion on casualty definition and calculation methods). Vapor exposures²⁶ are given in mg-min/m^3 ; liquid exposures are given in mg/m^2 .

Line #	Occupied Grid Position #:	Xwind, Upwind	Fractional Casualties	Number of Casualties	Agent Inhaled
1	1:	11.465, 50.497	1.000000	4.00	0.0000E+0
2	2:	11.564, 50.495	1.000000	4.00	0.0000E+0
3	3:	8.693, 50.315	1.000000	4.00	0.0000E+0
:	:	:	:	:	:
34	37:	9.376, 45.557	1.000000	2.00	0.0000E+0
35	40:	10.792, 42.386	1.000000	5.00	2.1987E+1
36	41:	9.312, 45.638	1.000000	2.00	0.0000E+0
37	43:	10.740, 42.320	1.000000	1.00	1.7648E+1
38	44:	10.438, 42.496	1.000000	2.00	3.2972E+0
39	48:	10.165, 46.551	1.000000	1.00	0.0000E+0

Figure III-12. Sample BioStrike Output

²⁵ These exposure values can be found in Appendices A-G.

²⁶ Note that for AMedP-8, the “Agent Inhaled” values in the BioStrike output should be interpreted as exposure values, or time-integrated environmental concentrations of agent. To determine the amount of agent inhaled, one would multiply these values by the breathing rate, typically 15L/min (for vapor exposure).

3. Post-processing of Protection Available Case Data

To account for skin protection afforded by masking, calculation of exposures in the protection available cases required an additional step, involving post-processing of the BioStrike output data. As discussed earlier, for the protection available case it was assumed that immediately following the attack, all personnel don masks within 1 minute and the full protective ensemble within 9 minutes. This means that protected personnel would experience ocular and respiratory exposures for 1 minute and skin exposures for 9 minutes. However, the mask will provide protection to those areas of skin it covers, so that skin exposure would be somewhat mitigated.

The AMedP-8 calculations assume a typical skin surface area per individual of 1 m^2 and a typical head and neck surface area of 0.07 m^2 . In the first minute after attack, skin exposure would be 100% of the exposure calculated by BioStrike. In minutes 2 through 9, however, skin exposure would be only 93% of that calculated. While it is possible to evaluate partial effects of protective measures within the BioStrike model, it is not possible to vary those effects over time. Therefore, the mitigating effect of masking on skin exposure had to be considered as a post-processing step.

For each protection available case, BioStrike was run twice in its Evaluation mode: once with exposure truncated at 1 minute and once with exposure truncated at 9 minutes. In an Excel spreadsheet, the 1-minute exposure values were subtracted from the 9-minute exposure values to obtain the exposure for minutes 2 through 9. This value was then multiplied by 0.93 to determine mitigating effects of masking on skin exposure. Finally, the 1-minute exposure values were added back in to determine the total skin exposure, from time of attack through masking and donning of the full protective ensemble.

IV. CASUALTY ESTIMATION METHODOLOGY

Section III described the methods IDA used to model and estimate vapor and liquid exposures with VLSTRACK, Gridgen, and BioStrike. IDA then provided these values to Pacific-Sierra Research (PSR), which calculated performance values and casualty estimates for each scenario.²⁷ Building on the Consolidated Human Response Nuclear Effects Model (CHRNEM) that PSR had designed for the development of AMedP-8 Nuclear and teamed with ARES Corporation, PSR applied a similar methodology to determine the effects of chemical exposure on performance; this model was called the DNA Improved Casualty Estimation Effort (DICE).^{28, 29}

The methodology developed by PSR accounted for the combined effects of liquid and vapor exposures for all exposure routes by estimating an equivalent vapor inhalation exposure. The equivalent dose was effectively the value of a single vapor dose expected to produce the same injury severity signs and symptoms as those resulting from the combination of vapor and liquid doses received. The equivalent dose was used to determine the Injury Severity Category (ISC)—a numerical scale developed to characterize agent effects—for affected personnel and was used in the DICE algorithms to determine performance degradation.

For the nerve agents that produce a direct effect on the nervous system only,³⁰ the methodology prescribed a single Injury Severity Category based on the equivalent dose. For GB, the equivalent dose was solely a function of vapor dose and the resultant inhalation and percutaneous effects. Due to the nonpersistent nature of the agent, the liquid dose was considered negligible and thus neglected. For VX, the equivalent dose was a function of the liquid dose (percutaneous effects only) and vapor dose (both inhalation and percutaneous effects) as described in Section IV.A. The PSR team selected these equivalent dose approximations during the development of their models.

The injury severity calculation for HD was more complex since the injury severity category was divided into symptoms related to three different systems—ocular (E), respiratory (R), and skin (S). Ocular and respiratory signs and symptoms were assumed to be a function of

²⁷ McClellan et al., 1998.

²⁸ Ibid., p. 1.

²⁹ Deverill et al., 1994. PSR manipulated the BioStrike data as required to achieve a format compatible with its models.

³⁰ Note that effects on the nervous system result in indirect effects on other organ systems, which result in the sign/symptom severities discussed in Section V.

vapor dose only.³¹ Skin signs and symptoms, on the contrary, were assumed to result from both vapor and liquid exposure, or from the equivalent dose.

In addition to being used to determine the Injury Severity Categories for affected personnel, the equivalent dose for GB and VX and the vapor and equivalent doses for HD were used to calculate performance as described in Section V.

A. CALCULATION OF EQUIVALENT DOSE

As summarized above, the equivalent dose was a value computed by PSR for use in the DICE algorithm. The equivalent dose was calculated using a series of ratios comparing inhalation and percutaneous effects as a result of both vapor and liquid exposures estimated in BioStrike. The equivalent dose is described here very generally and further detailed in Appendix J.

For the nerve agent GB, vapor exposure estimates solely determined the equivalent dose; calculations neglected liquid exposure estimates. The equivalent dose, therefore, was a function of the inhalation and percutaneous effects of GB vapor. The percutaneous effects were scaled for use in the equivalent dose by using a ratio of the agent required to produce severe inhalation effects in 50% of the population (ICT₅₀) to the agent required to produce severe percutaneous effects due to vapor in 50% of the population (ED₅₀). That is,

$$\text{Equivalent Dose}_{\text{GB}} = f(\text{GB Vapor}_{\text{inhalation}}, \text{GB Vapor}_{\text{percutaneous}})$$

For the nerve agent VX, both vapor and liquid estimated exposures contributed to the calculated equivalent dose. VX vapor contributed to both inhalation and percutaneous doses, while VX liquid contributed only a percutaneous dose. The equivalent dose for VX was a function of both VX vapor doses and the VX liquid dose. Ratios similar to that used in the GB equivalent dose calculation were used to correlate percutaneous effects due to liquid and vapor exposure to inhalation effects due to vapor. Thus,

$$\text{Equivalent Dose}_{\text{VX}} = f(\text{VX Vapor}_{\text{inhalation}}, \text{VX Vapor}_{\text{percutaneous}}, \text{VX Liquid}_{\text{percutaneous}})$$

Equivalent dose calculations for the blister agent HD were similar to those for VX in that vapor exposure resulted in both inhalation and percutaneous doses, while liquid exposure resulted only in a percutaneous dose. The calculation of the HD equivalent dose used ratios, as described above. Therefore,

$$\text{Equivalent Dose}_{\text{HD}} = f(\text{HD Vapor}_{\text{inhalation}}, \text{HD Vapor}_{\text{percutaneous}}, \text{HD Liquid}_{\text{percutaneous}})$$

³¹ Note that VLSTRACK models the evaporation of liquid agent and accounts for it during vapor modeling.

AMedP-8 Chemical does not present either chemical exposure estimates or equivalent doses. Appendices A through G document these values, however; each appendix pertains to one of seven scenarios, as discussed in Section III. For each scenario, the corresponding appendix contains a table listing insults for each icon, for all cases (combinations of agent, munition, intensity, and posture).³²

Copies of the original input files and the exposure data values generated by IDA during the development of AMedP-8 were used to produce the exposure tables included in Appendices A-G. IDA regenerated these tables specifically for inclusion in this documentation effort. The exposure data in Appendices A-G is similar to the data used to produce the original insult tables for AMedP-8; only minor calculation differences exist.

B. CORRELATION OF EXPOSURE TO INJURY SEVERITY CATEGORIES

1. Generating Injury Severity Category Tables

Nerve agents GB and VX primarily impact a single type of tissue—nerve tissue; the injury they produce in the body may therefore be considered systemic. It was assumed that effects were independent of the mode of exposure—inhalation or percutaneous—and the agent form—liquid or vapor. Blister agent HD, on the other hand, impacts multiple bodily tissues differently, including the eyes, the respiratory system, and the skin, producing different injuries at different times after exposure to each.

In order to estimate the casualties resulting from chemical exposure, Injury Severity Categories were created. Easily recognized signs and symptoms of illness and their associated causative chemical exposure values were used to set the range boundaries for the Injury Severity Categories. Dose ranges resulting in ocular impairment, severe effects, and lethality in 10%, 50%, and 90% of the population were compared in order to select the Injury Severity Category ranges. These categories correspond to those used in the DICE model and are based on dose relationships adopted by the US Army Nuclear and Chemical Agency (USANCA).³³ More information on the generation of these tables is provided in Appendix K.

For GB, a single table indicating the chemical agent's systemic effects solely due to vapor exposure was created.

Initially, dose symptomology tables did not exist for VX. Due to the similar toxicity mechanism of both nerve agents, GB and VX, the illness signs and symptoms were expected to be similar. To generate the injury severity category table for VX, an incidence dosage

³² Note that, for most scenarios, icon numbers are the same as gridpoint numbers.

³³ McClellan et al., 1998, p. 4.

correlation was performed between GB and VX. Using the USANCA dose relationships at 10%, 50% and 90% severe inhalation affects incidence dosages, VX vapor inhalation exposures were correlated to GB vapor inhalation exposures. The same incidence dosages were used to correlate VX liquid percutaneous exposures to VX and GB vapor inhalation exposures. Using these correlations, the ranges for injury severity category due to VX exposure are directly relatable to the boundaries for injury severity due to GB exposure. A more detailed explanation of this methodology is contained in Appendix K.

Due to HD's different effects on several bodily tissue types, multiple injury severity categories were established to represent systemic/respiratory, skin, and ocular effects.

The Injury Severity Category tables found below have been extracted from pages 3-12 through 3-16 of the AMedP-8 Chemical manual. These tables were derived from tables shown in *Consequence Analytic Tools for NBC Operations*³⁴ and were changed by the working group to arrive at the tables shown below. Note that the values listed under "Inhaled Vapor Exposure Range," "Vapor Inhalation Exposure Range," and "Exposure Range," as listed in the following tables, represent the calculated Equivalent Dose.

³⁴ McClellan et al., 1998.

Table IV-1. Injury Severity Categories from unprotected exposure to sarin (GB) vapor

		Injury Severity Category	
Injury Category	Inhaled Vapor Exposure Range Ct (mg-min/m³)	Typical Description	Abbreviation
1	0 - .25	No obvious signs or symptoms of injury.	No effects
2	.25 - 3	Nose drips fluid; airway secretions; variable ocular effects from miosis; headache; 10% have ocular or nasal response at 0.3 mg-min/m ³ ; 50% at 0.5 mg-min/m ³ ; and 90% at 0.7 mg-min/m ³ .	Nose drip, miosis
3	3 - 6	Eye pain with frontal headache; blurred and dim vision; small pupils; some tightness in chest with increased airway secretions and occasional cough; most signs stop within hours but eyes signs may last up to one week.*	Eye pain, headache
4	6 - 15	Severe headache; eye pain with sensitivity to light and blurred vision, maximal effects in all eyes exposed directly to GB vapor; closing airways with wheezing sounds; nausea/vomiting; weakness; most signs continue for 2 to 3 days but eye effects remain for several days.*	Headache, nausea
5	15 - 30	Tight chest from closing airways and excessive secretions; coughing; vomiting; abdominal cramps; salivation; severe headache with anxiety and confusion; many have tremors or collapse, some convulse; 10% have severe effects at 23 mg-min/m ³ ; some signs may continue for days or weeks.*	Tight chest, tremors
6	30 - 50	Difficult breathing; weakness; urination; diarrhea; convulsions may be followed by collapse or respiratory failure; 50% have severe effects at 35 mg-min/m ³ ; 10% die at 45 mg-min/m ³ .*	Convulsions, some deaths
7	50 - 75	Collapse, paralysis or respiratory failure; 90% have severe effects at 55 mg-min/m ³ ; 50% die at 70 mg-min/m ³ .*	Respiratory failure, half die
8	>75	Respiratory failure or unconsciousness; 90% die at 110 mg-min/m ³ .*	Unconsciousness, high mortality

* Descriptions may include all signs and symptoms described for lower dosages. The typical description does not indicate the range of more or less severe responses that reflects normal individual variation.

Source: STANAG 2477, p. 3-15.

Table IV-2. Injury Severity Categories from exposure to VX vapor or liquid

			Injury Severity Category	
Injury Category	Liquid Deposition Exposure Range (mg/m ²)	Vapor Inhalation Exposure Range Ct (mg-min/m ³)	Typical Description	Abbreviation
1	0 – 0.01	0 – 0.05	No obvious signs or symptoms of injury.	No effects
2	0.01 – 0.4	0.05 – 2	Nose drips fluid; airway secretions; variable ocular effects from miosis; headache; 10% have mild ocular or nasal effects at 0.06 mg-min/m ³ , 50% at 0.09 mg-min/m ³ , and 90% at 0.14 mg-min/mg ³ .	Nose drip, miosis
3	0.4 – 0.8	2 – 4	Eye pain with frontal headache; blurred and dim vision; small pupils; nausea; some tightness in chest with increased airway secretions and occasional cough; most signs stop within hours but eye signs may last up to one week*	Eye pain, headache
4	0.8 – 2	4 – 10	Severe headache; eye pain with sensitivity to light and blurred vision, maximal effects in all eyes exposed directly to GB vapor; closing airways with wheezing sounds; nausea/vomiting; weakness; most signs continue for 2 to 3 days but eye effects remain for several days.*	Headache, nausea
5	2 – 4	10 – 19	Tight chest from closing airways and excessive secretions; coughing; vomiting; abdominal cramps; salivation; severe headache with anxiety and confusion; many have tremors or collapse, some convulse; 10% have severe effects from vapor inhalation at 17 mg-min/m ³ or from percutaneous exposure to 15 mg-min/m ³ of vapor or 2.8 mg of liquid.*	Tight chest, tremors
6	4 – 8	19 – 29	Difficult breathing; weakness; urination; diarrhea; severe tremors or convulsions may be followed by collapse or respiratory failure; 50% have severe effects from vapor at 25 mg-min/m ³ or from percutaneous exposure to 20 mg-min/m ³ of vapor or 5 mg of liquid; 10% die from vapor inhalation at 20 mg-min/m ³ or from percutaneous exposure to 90 mg-min/m ³ of vapor or 6 mg of liquid.*	Convulsions, some deaths
7	8 – 12	29 – 40	Collapse, paralysis or respiratory failure; 90% have severe effects from vapor inhalation at 37 mg-min/m ³ or from percutaneous exposure to 41 mg-min/m ³ of vapor or 9 mg of liquid; 50% die from vapor inhalation of 30 mg-min/m ³ or from percutaneous exposure to 150 mg-min/m ³ of vapor or 10 mg of liquid.*	Respiratory failure, half die
8	> 12	> 40	Respiratory failure or unconsciousness; 90% mortality from vapor inhalation at 45 mg-min/m ³ or from percutaneous exposure to 250 mg-min/m ³ of vapor of 16 mg of liquid.*	Unconsciousness, high mortality

* Descriptions may include all signs and symptoms described for lower dosages. The typical description does not indicate the range of more or less severe responses that reflects normal individual variation.

Source: STANAG 2477, p. 3-16.

Table IV-3. Injury Severity Categories of eye effects from exposure to HD vapor

		Injury Severity Category	
Injury Category	Exposure Range Ct (mg-min/m ³)	Description	Abbreviation
1	0 – 5	No obvious signs or symptoms of injury.	No effects
2	5 – 50	Reddened conjunctiva and tears that may blur vision; 10% have mild ocular effects at 6 mg-min/ m ³ ; 50% at 25 mg-min/m ³ .	Blurred vision
3	50 – 70	Eyes feel gritty and sensitive to light; many tears and swollen membranes reduce vision; recovery takes 1 to 2 weeks.*	Light Sensitive
4	70 – 100	Eye discomfort; photophobia; non-stop tears flood eyes; 90% have mild ocular effects at 95 mg-min/m ³ ; recovery takes 2 to 5 weeks.*	Non-stop tears
5	100 – 150	Eyelids are swollen and eyes burn; eyes are too painful to keep open; damage to cornea; temporary relapses occur and convalescence may take 2 to 3 months.*	Little vision
6	> 150	Eyelids are swollen shut and burning; eyes are too painful to open; convalescence from severe conjunctival and corneal damage may take several months after exposures to high dosages of HD.*	Can't see

* Descriptions may include all signs and symptoms described for lower dosages. The typical description does not indicate the range of more or less severe responses that reflects normal individual variation.

Source: STANAG 2477, p. 3-12.

Table IV-4. Injury Severity Categories of respiratory/systemic effects from exposure to HD vapor

		Injury Severity Category	
Injury Category	Exposure Range Ct (mg-min/m³)	Description	Abbreviation
1	0 – 50	No obvious signs or symptoms of injury.	No effects
2	50 – 70	Nauseated, swallows often.*	Nausea
3	70 – 100	Dry mouth; dry cough; sneezing; runny nose; headache; nausea; may vomit once or twice; 10% have severe effects at 80 mg-min/m ³ ; recovery may take 2 weeks.*	Cough, headache
4	100 – 150	Sore throat; continuous cough; hoarseness; vomits; chest feels tight; headache; fever; 50% have severe effects at 135 mg-min/m ³ .*	Coughing and vomiting
5	150 – 250	Hurts to breath; hacking cough; cannot speak; headache; dry vomiting; fatigued from vomiting and abdominal pain; 90% have severe effects at 230 mg-min/m ³ ; bronchopneumonia may occur after 48 hours and recovery may take 1 to 2 months.*	Voice loss, dry vomiting
6	250 – 1200	Severe chest pain; wheezing and shortness of breath; coughs up red colored mucous; 10% die at 600 mg-min/m ³ and 50% mortality at 1000 mg-min/m ³ ; deaths within a few days occur after choking with pulmonary edema, obstruction or pneumonia.*	Choking, ± 50% die
7	>1200	Very severe effects; 90% mortality at 1700 mg-min/m ³ ; pieces of dead tissue obstruct airways and add early deaths to those from edema or infection.*	Obstruction, high mortality

* Descriptions may include all signs and symptoms described for lower dosages. The typical description does not indicate the range of more or less severe responses that reflects normal individual variation.

Source: STANAG 2477, p. 3-13.

Table IV-5. Injury Severity Categories of wet skin effects from exposure to HD vapor or liquid

		Injury Severity Category	
Injury Category	Vapor Exposure Range Ct (mg-min/m³)	Description	Abbreviation
1	0 – 25	No obvious signs or symptoms of injury.	No effects
2	25 – 100	Skin sensitive to touch in tender areas (crotch, armpits, inside of elbow and knee); threshold effects in 10% at 30 mg-min/m ³ , in 50% at 50 mg-min/m ³ , and in 90% at 80 mg-min/m ³ .*	Sensitive
3	100 – 250	Skin sore or itching and burning in tender areas; painful when moving; red body skin; tiny blisters on hands and neck.*	Sore, red
4	250 – 500	Skin raw and painful or itching in tender areas; red, swollen body skin; large blisters on neck, fingers, and backs of hands; new blisters may appear each day for a week or more.*	Blisters, swelling
5	500 – 750	Skin peels off leaving open raw areas and painful ulcers in tender areas; may vomit; raw areas may take several weeks to heal.*	Raw ulcers
6	750 – 1500	Headache; nausea; fever or hypothermia; 10% have severe body skin effects at 1200 mg-min/m ³ or at 350 mg liquid exposure over whole body; skin healing may take several weeks or months.*,**	Systemic effects
7	1500 – 4000	50% have red, raw body skin at 2000 mg-min/m ³ or 1400 mg liquid exposure over whole body; 90% have severe body skin effects at 3300 mg-min/m ³ or 5500 mg liquid exposure over whole body.***	Raw skin on body
8	4000 – 12,000	10% die at 6500 mg-min/m ³ or 2700 mg liquid exposure over whole body; 50% die at 10,000 mg-min/m ³ or 7000 mg liquid exposure of whole body.***	Intoxication, ± 50% die
9	>12,000	90% die at 15,000 mg-min/m ³ or 18,000 mg liquid exposure over whole body.***	Shock, high mortality

* Descriptions may include all signs and symptoms described for lower dosages. The typical description does not indicate the range of more or less severe responses that reflects normal individual variation.

** Liquid exposures are estimated on the basis of equivalent vapor dosages.

Source: STANAG 2477, p. 3-14.

2. Determining Injury Severity Category

As stated above, in the case of GB, only vapor dose was considered; marginal liquid exposure or percutaneous dose was expected due to the nature of the agent. In order to determine the Injury Severity Category as a result of exposure to GB, the equivalent dose (as a

composite of inhalation and percutaneous doses resulting from vapor exposure) is entered into the table. The expected symptoms and ISC can then be determined.

For VX, similarly, the equivalent dose is used to determine ISCs. Note that Table IV-2 data were not used in determining VX ISCs during the generation of AMED P-8 Chemical. Table IV-2 did not exist when PSR began building their DICE methodology; the derivation of this table is shown in Appendix K. To calculate the ISCs for VX, using a correlation ratio comparing the amount of GB vapor required to produce severe inhalation effects in 50% of the population with the amount of VX required to produce severe effects (both inhalation and percutaneous) in 50% of the population, VX liquid and vapor doses were converted to an equivalent GB dose and then entered into Table IV-1 (ISCs from exposure to GB vapor or liquid) in order to determine the ISC.

Table IV-6. VX Injury Severity Category Calculation Comparison

VX 250kg Bomb Heavy Attack Height of Release: 70m											
Grid Position (Icon #)	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Using VX Tables				Using GB Tables			
				Inhalation Equivalent Exposure (mg-min/m ³)	Percutaneous Equivalent Exposure (mg-min/m ³)	Total Equivalent Exposure (mg-min/m ³)	Injury Severity Category	Inhalation Equivalent Exposure (mg-min/m ³)	Percutaneous Equivalent Exposure (mg-min/m ³)	Total Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected 24 rounds at aimpoint (17.65, 20.15)											
38	2	5.67E+00	7.11E+01	5.67E+00	1.83E+02	1.89E+02	8	7.94E+00	5.06E+02	5.14E+02	8
40	2	6.38E+00	8.67E+01	6.38E+00	2.23E+02	2.30E+02	8	8.93E+00	6.16E+02	6.25E+02	8
778	1	1.54E+00	1.27E+00	1.54E+00	4.72E+00	6.26E+00	4	2.16E+00	1.10E+01	1.32E+01	4
780	3	1.44E+00	1.15E+00	1.44E+00	4.32E+00	5.76E+00	4	2.02E+00	1.01E+01	1.21E+01	4
993	3	2.26E-01	1.08E+00	2.26E-01	2.93E+00	3.15E+00	3	3.16E-01	7.88E+00	8.19E+00	4
994	8	2.30E+00	7.45E+00	2.30E+00	2.09E+01	2.32E+01	6	3.22E+00	5.54E+01	5.86E+01	7
996	7	1.72E+00	5.62E+00	1.72E+00	1.58E+01	1.75E+01	5	2.41E+00	4.17E+01	4.42E+01	6

Due to VX's steeper probit slope, using the GB ISC tables vice the VX ISC tables results in assignment of higher ISC values than would have been assigned had the VX tables been used. At the extremes and at the midpoint, the table results are similar. Had Table IV-2 been used vice Table IV-1, a similar number of casualties would have resulted; however, many casualties would have been assigned lower ISCs values.

For HD, the process is more involved. The ISC for HD is a composite of the ocular (E – eye), respiratory (R), and skin (S) categories, which is tabulated for exposures in AMedP-8 Chemical and written as 1-2-3, for example, where the ocular ISC is 1, the respiratory ISC is 2, and the skin ISC is 3. Equivalent dose is used to determine the skin ISC. Because ocular and respiratory effects result only from vapor exposure, only the vapor exposure is used to determine the E and R ISCs.

The documentation process revealed a significant discrepancy. Although Injury Severity Category six is the highest category given for eye effects due to HD exposure, category five is the highest category assigned to any icon in the tables given in Appendices 4 through 10 of AMedP-8 Chemical. Calculations to produce Appendices A through F for this documentation effort indicate that approximately 50 attacks could have resulted in an ISC of 6; in AMedP-8 Chemical, these attacks are included; however, they are listed with an ISC of 5 instead. Since performance calculations are based on exposures vice ISCs, the authors estimate that this discrepancy does not impact the performance calculations.

Dose (mg) can be determined using the above tables. For inhalation effects, as shown in Tables IV-1, IV-2, and IV-4, the assumed breathing rate of 15 l/min ($.015 \text{ m}^3/\text{min}$) was used. Percutaneous doses, based on the assumption of 1 m^2 exposed skin/person, were converted to equivalent vapor doses and added to the inhaled vapor doses to calculate effective dose. The resulting effective dose is equivalent to the inhaled vapor exposure (labeled “Inhaled Vapor Exposure Range”) given in the Injury Severity tables (Tables IV-1 through IV-5).

V. CALCULATION OF POST-ATTACK PERFORMANCE CAPABILITY

In addition to using the calculated exposures for determining ISC, as described in Section IV, exposures were input into the DICE model to determine performance capability of personnel following exposure to chemical agent. The vapor and liquid doses calculated by BioStrike were used as the basis for these performance calculations. Vapor, liquid, and effective doses were calculated (as described above); in addition, VX doses were converted to equivalent GB doses for calculation.

Sign/symptom severity profiles were generated for each agent as a function of equivalent dose, time, and physiological system affected. A scale of one to five (one is the best or least injurious, five the worst) delineates the sign/symptom severity categories. For each dose range, the severity category is plotted against time on a logarithmic scale. A table is produced for each system affected. GB and VX agent effects manifest with six sets of symptoms—upper gastrointestinal, lower gastrointestinal, muscular, ocular, respiratory, and mental (CNS)—whereas HD symptoms impact the body in four ways—skin, systemic (whole body), respiratory, and ocular.

A. DETERMINING SIGN/SYMPTOM SEVERITY PROFILES

In order to determine the sign/symptom severity profiles, crewmembers loading and firing an M119A1 light Howitzer were selected as representative of a combat soldier. Their performance can be measured as a function of time, accuracy, or a combination of both; however, time was used as the only criterion. For the DNA/IDP model, it was determined that only subject matter experts (SMEs)—enlisted personnel with experience operating a Howitzer and performing other general tasks—could provide accurate estimates of the impact of injury on time to perform tasks.

The signs and symptoms associated with each chemical agent and exposure range were explained as textual descriptions. SMEs were given questionnaires with the associated signs/symptoms descriptions and asked to quantify how long particular tasks would take given the signs/symptoms prescribed. These values were then quantified to establish performance characterizations, using the Defense Nuclear Agency/Intermediate Dose Program (DNA/IDP) methodology.³⁵ Given the chemical insults, the DICE algorithm estimates performance—the capability of individuals performing general combat tasks at various times after exposure.

Note that injury severity categories and sign/symptom severity categories are not the same; ISCs prescribe the manifest symptoms resulting in the primary system(s) affected based on

³⁵ Anno et al., 1994.

particular dose ranges, whereas sign/symptom severity categories describe the changing symptoms in several different physiological systems over time. Table V-1 provides one example: given HD vapor and liquid exposure from a light artillery attack, the overall ISC and the sign/symptom severity categories at 3 hours and 30 days, with calculated performance, are shown.

Table V-1. HD Exposure, ISC, and Performance Calculations

Mustard (HD) 152mm Artillery Light Attack Height of Release: 15m																	
Grid Position (Icon #)	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category			3 Hours --					30 Days --				
								Sign/symptom Severity Categories					Sign/symptom Severity Categories				
					E	R	S	Skin	Resp	Sys	Oc	Perf	Skin	Resp	Sys	Oc	Perf
Case 1: Unprotected					18 rounds at aimpoint (10.55, 43.65)												
361	8	9.72E+00	3.89E+01	6.53E+01	2	1	2	1	1	1	1	1	1	1	1	1	
363	8	7.60E+01	1.90E+02	3.47E+02	4	3	4	2	1	1	2	0.6420	1	1	1	1	
365	8	3.16E+02	7.92E+02	1.45E+03	6	6	6	5	3	1	3	0.0021	1	2	3	1	
382	8	2.80E+01	5.84E+01	1.11E+02	2	1	3	1	1	1	1	1	1	1	1	1	

B. PHYSICAL EFFECTIVENESS AS A FUNCTION OF PERFORMANCE

The performance measure helps determine the post-exposure physical effectiveness of an individual after exposure. Physical effectiveness is decremented as in the combined injury model³⁶ using a measure, which accounts for the increased time required to perform a task correctly. Thus, an individual who is described as 50% capable requires twice as much time to perform a task as required by someone who is 100% capable. Estimates of residual performance (performance capability of a typical soldier who was initially healthy) were based on the earlier mentioned questionnaire-based study, which considered the typical symptoms and severity that would be caused by exposure to a chemical agent. Table IV-6 defines the categories used in the tables described in Sections 3.0-3.3 of the AMedP-8 Chemical manual, and listed below. Personnel categories such as “fatalities,” “casualties,” and “capable” found in the tables are based on individual physical effectiveness as determined by the DICE model.

The use of 25% capable as the defining level of a casualty does not restrict an individual from entering the medical system at any other level of performance; however, the expectation is that the exposure levels reducing performance to 25% would result in symptoms that would require medical treatment. Further, the concepts of physical effectiveness and percentage capabilities include those who are apparently fit for duty but have been exposed to chemical agent. Casualty flags are assigned for any individual whose performance drops to 25% or below at any time during the evaluation period. Performance for GB and VX was calculated at hours 1

³⁶ McClellan et al., 1998, p. 17.

and 12 and for the first 7 days after exposure; performance for HD was calculated 3 hours after exposure, every day for the first week after exposure, and at days 15 and 30. In PSR's documentation, casualty flags for the HD injury categories were included.³⁷ IDA verified these values for its own internal performance calculations. It appears that, for a skin exposure of 500 mg-min/m³, an average of the sign/symptom severity "2" for the 250-500 mg-min/m³ range and the sign symptom severity "5" for the 500-1000 mg-min/m³ was used; only by using a skin sign/symptom severity of "3.5" at 500 mg-min/m³ was IDA able to reproduce the performance values included on the casualty flag tables.

An individual whose performance has dropped to 25% capable or lower becomes a casualty. Over the course of the evaluation period—3 hours to 30 days for HD and 1 hour to 7 days for GB and VX—the individual can remain a casualty, can become a fatality, or can eventually return to duty (RTD). The individual becomes a fatality if the calculated performance capability drops below the fatality performance threshold 0.01% for GB and VX or below 0.0023% for HD as shown in Table V-2.

Table V-2. Performance Capability Categories.

Category	Definition
Fatality	<0.01% capable (GB, VX) <0.0023% capable (HD)
Casualty	>0% but <=25% capable (in medical system until recovery is >=75%)
Capable	>25% capable
Return-to-duty (RTD)	A casualty who recovers to >=75% capable
Sick Again	A return to duty (RTD) whose capability has dropped to <= 25%

The PSR documentation indicates that the basis for selecting 0.0023% for HD was that this value was higher than the lowest sign/symptom severity combination that resulted in a performance of 0.0022%.³⁸ IDA's recalculation of performance for HD showed that the lowest demonstrated sign/symptom severity combination "5-4-5-5" (skin-respiratory-systemic-ocular) results in performance of 0.0013%; the next lowest combination was "5-4-4-5" with performance of 0.0024%. IDA assumes that the fatality threshold was selected to be immediately below the second lowest sign/symptom severity category vice just above the minimum sign/symptom severity category as documented by PSR.

³⁷ Ibid., p. 65 – 69.

³⁸ Ibid., p. 36.

If an individual's calculated performance improves, the individual can eventually become an RTD once calculated performance increases greater than or equal to 75% capable. RTDs provide an estimate for the number of expected recoveries; however, this value is only an estimate and should be used only as a worst-case basis for manning estimation. Performance calculations are based solely on illness progression as a result of chemical exposure and do not accounting for medical treatment, since the purpose of AMedP-8 was to estimate casualties for planning purposes. The individual, therefore, who becomes an RTD does so as the signs and symptoms of injury run their natural course; with treatment, this patient and others may potentially return to duty sooner.

Notably, the performance criteria established by the DICE algorithms tend to overestimate fatalities as a result of vapor exposure and underestimate fatalities from liquid exposure.³⁹ The impact of these inaccuracies, however, is not as obvious, because the targeting was optimized to maximize production of non-lethal casualties vice production of fatalities.

C. GENERATION OF PERFORMANCE TABLES

In AMedP-8, performance capability data are captured in three different types of tables for each scenario and each agent:

- Status of Unit Personnel Over Time
- Casualties Occurring by Time Period
- Personnel by Injury Category

Personnel status after a chemical detonation is presented in the tables in Sections 4 through 10 of AMedP-8 Chemical.

Note two important details about the generation of the above tables for HD. First, in order to avoid calculating and listing the effects of extremely low level exposures, soldiers 99.5% capable and above are considered 100% capable.⁴⁰

Second, determining the time-dependent injury by casualty type, the associated category (eye, respiratory, skin) is assumed to have a resulting injury if the sign/symptom category⁴¹ level is greater than or equal to two (at the time of the evaluation), not if the injury severity category is greater than or equal to two, as might be assumed. Thus, an eye injury would be present if the sign/symptom severity ocular was greater than or equal to two. Similarly, a skin injury would be present with a sign/symptom severity skin greater than or equal to two. For respiratory, an injury

³⁹ Ibid., p. 37.

⁴⁰ Ibid., p. 54.

⁴¹ See Appendix L, Tables L-2 and L-3; these tables demonstrate the sign/symptom severity categories over time for each exposure range.

is present when either the sign/symptom severity respiratory or systemic is greater than or equal to two.

IDA recalculated the performance tables for HD exposure associated with the Heavy Brigade, Forward Maneuver, Movement to Contact and Heavy Brigade, Brigade Support, Movement to Contact (Appendices 4 and 5 in AMedP-8 Chemical). These calculations pointed out minor discrepancies between the published data in AMedP-8 and the results of IDA's calculations. Although the number of total casualties is similar in most cases, the types of casualties, times at which they occur, and resultant number of fatalities differ.

IDA has not yet recalculated the GB or VX performance values. IDA has utilized the methodology and values described above and in Annex L; however, without access to the course of sign/symptom severities over time, it cannot verify the GB and VX tables. This requires additional resolution and is a work in progress.

VI. REMAINING METHODOLOGY QUESTIONS

During the course of the documentation efforts, IDA identified several inconsistencies and/or areas of inadequate documentation regarding the methods in the original study to product AMedP-8 Chemical. Several of these have already been identified above; additional questions are included below. These questions are being addressed as additional information is provided.

A. EXPOSURE RANGE SELECTION

A question was raised regarding the rationale used to select the DICE vapor exposure ranges which were used as the basis for the sign/symptom severity graph. According to one of the source technical reports, the seven initial vapor exposure ranges are: 10–50, 50–70, 70–100, 100–150, 150–250, 250–500, and 500–1000 (all in mg-min/m³).⁴² However, these ranges seem inconsistent with the Injury Severity Category ranges. For example, for a skin exposure below 25 mg-min/m³, there is no injury, whereas exposures between 25 mg-min/m³ and 100 mg-min/m³ result in skin that is sensitive and tender. Therefore, there is concern regarding the risk that dividing the range at 50 mg-min/m³ vice 25 mg-min/m³ will fail to capture some symptomatic individuals.

B. TABLE GENERATION

During IDA's attempt to replicate a sample from the tables found in AMedP-8 Chemical, the following questions arose.

The documentation defines casualties and fatalities; however, it does not explain if all, some, or no fatalities are assumed to be casualties prior to becoming fatalities. It is apparent from the documentation that the definition of a casualty is less than or equal to 25% performance and the definition of a fatality is less than or equal to 0.0023%. IDA was unable to determine if the definition of casualty is lower bounded by the definition of fatality. Calculations using these values and the same starting exposures do not yield the same number of fatalities or casualties as the tables included in the appendices of AMedP-8 Chemical. In addition, an individual who becomes a fatality, under normal circumstances, can be assumed to have some type of medical treatment prior to become a fatality. Therefore, for estimation and planning purposes it would seem that casualties should include fatalities during that time period. Those numbers do not currently seem to be included as casualties.

In addition, regarding definitions, IDA was unsure of the relationship (if any) between performance bands and RTDs. For example, when an individual was a casualty (below 25%

⁴² McClellan et al., 1998, p. 39.

performance) and improved to >25% performance but not above 75% (return-to-duty criterion), it was unclear if he/she was counted either in the capable by performance band or casualty band, both, or neither.

In the tables displaying Status of Unit Personnel over Time, it was unclear if the performance band, casualty and fatality values are cumulative. For example, in Table 7-56 of AMedP-8 Chemical, Status of Unit Personnel by Time Period, Heavy Brigade, Forward Maneuver, Defense, Bombs, Light Attack, at hour 3, 18 people are ERS casualties, with an additional 28 people below 100% performance capability. At the end of Day 1, 15 people are ERS casualties and 10 are ES casualties, 14 are fatalities, and 13 additional are below 100% performance capability. IDA was unable to determine whether the 15 ERS casualties were new casualties or if they were 15 individuals who remained casualties from the previous day, with an additional 3 personnel having become fatalities.

In the Casualties Occurring by Time Period tables, there was a question about how casualties and fatalities were determined. We did not know how to determine if fatalities were casualties from a previous day or if they became casualties and fatalities within a single time period. For example, in Table 7-62, Casualties Occurring by Time Period, Heavy Brigade, Forward Maneuver, Defense, MRLS/Artillery, Light Attack, at Hour 3, 30 people are ERS casualties. At Day 1, 15 people are fatalities and there are no casualties. This would seem to imply that 15 of the 30 became fatalities, and 15 remain casualties. At Day 30, 21 people return to duty. This should not be possible, because if 15 people became fatalities, then there should be only 15 available for return-to-duty. Otherwise, the assumption must be made that the fatalities are in addition to the 30 casualties, or that only some undefined portion of those 30 became fatalities. This may not be a valid assumption, because it suggests that fatalities receive no medical treatment before becoming fatalities.

In addition, a second type of discrepancy appears in several tables, including Table 7-66, Casualties Occurring by Time Period, Heavy Brigade, Forward Maneuver, Defense, Bombs, Light Attack. At Hour 3, there are 18 casualties. At Day 1, 10 people are ES casualties and 14 are fatalities; however, the “total casualties” section of the table lists only 7 casualties. Similarly in Table 7-66, Casualties Occurring by Time Period, Heavy Brigade, Forward Maneuver, Defense, Bombs, Moderate Attack, at Hour 3, 60 people are ERS casualties. At Day 1, 10 people are noted as ES casualties and 43 are listed as fatalities; however, in the total casualties section for Day 1, there are no total casualties. Based on the documenters’ understanding of these tables, the total number of casualties by injury type should equal the number of casualties in the total injury section. The documenters were unable to determine why this was not the case, however.

VII. AMedP-8 CHEMICAL DOCUMENT APPEARANCE

The AMedP-8 Chemical manual is organized into eleven sections:

- Section 1. Introduction
- Section 2. Methodology
- Section 3. Casualty Tables- Explanation and How to Use Them
- Section 4. Heavy Brigade, Forward Maneuver, Movement to Contact
- Section 5. Heavy Brigade, Brigade Support Area, Movement to Contact
- Section 6. Heavy Brigade, Forward Maneuver, Offense
- Section 7. Heavy Brigade, Forward Maneuver, Defense
- Section 8. Heavy Brigade, Brigade Support Area, Offense and Defense
- Section 9. Support Brigade
- Section 10. Light Infantry Brigade - Defense
- Section 11. How To Find Casualty Estimates For Sample Problems

Sections 1–3 provide the background and administrative information necessary to use AMedP-8. Sections 4–10 are each specific to one of the seven tactical scenarios and are essentially identical in construction, including the tables that provide the data necessary for casualty estimation. Each section is divided into three subsections: one each for the chemical agents GB, VX, and HD. Within each subsection, the casualty estimation information is provided in two forms: casualties as a function of time, and casualties by type and intensity of injury. Section 11 provides a step-by-step set of instructions on how to use the document.

In each subsection, the first four tables are summary tables. They present estimates for each of the weapon/delivery system combinations for each of three attack intensities and for both protection available and protection unavailable postures. These four tables provide casualty estimates at 1 and 12 hours and 1 and 7 days after agent release. They also provide the information on the Status of Unit Personnel for the three delivery systems, three attack intensities, and two postures for the major time periods included in this manual. For example, Table *n-1* (where *n* is the section number [4-10] in AMedP-8) presents the status of unit personnel at 1 hour after low, moderate, and high intensity GB attacks using Multiple Rocket Launch Systems (MRLS)/artillery, bombs, or Tactical Ballistic Missiles (TBMs) for both protective postures. The first four tables in each subsection allow the planner to rapidly compare medical workloads for units with or without protection available, across attack intensities. These estimates provide the total number of personnel in each category at the specified time.

Two sets of nine tables follow the initial Summary Tables in each subsection. The first set of nine provides the “Status of Unit Personnel Over Time” for the nine combinations of agent delivery system and attack intensity. The tables entitled “Status of Unit Personnel Over Time”

are designed to provide an overview of the unit status at a specified time. Time is particularly important because a person's effectiveness will change over time due to the progress of different injuries. For GB and VX, the total number of personnel in the unit who are casualties, fatalities, capable (cumulative and divided by performance bands), and Returned to Duty (RTD) are enumerated for the first hour, hour 12, and daily from day 1 to day 7. For HD, unit personnel in these categories are enumerated for hour 3, daily from day 1 to day 7, day 15, and day 30. Estimates for light MRLS/artillery attacks are presented for personnel with protection unavailable and protection available, followed by tables of casualty estimates for moderate and heavy attacks. Attacks with bombs and TBMs follow similarly. The tables entitled "Casualties Occurring Over Time" provide estimates of the additions to each category—Casualties, Fatalities, RTD—as they occur for each time period. The last set of tables in each subsection is a pair of tables, entitled "Personnel by Insult Category" for protection unavailable and protection available postures, respectively. These tables provide an alternative method for categorizing personnel after a chemical agent exposure, i.e., by injury and/or by exposure level. This type of table provides estimates of personnel exposed to a range of insult levels and the resultant injuries. The tables are keyed to injury levels. An injury level is presented for each of the systemic effects of GB and VX, and for eye, skin, and respiratory/systemic effect of HD.

More detailed information on the content and organization of AMedP-8 is available in Section 3 of the STANAG.

VIII. SUMMARY OF CASUALTIES BY SCENARIO

AMedP-8 Chemical provides estimates of the numbers, types, and times of casualties resulting from the release of one of three different types of chemical agents (GB, VX or HD) by three different weapon delivery systems (MRLS/artillery, bombs, or TBMs) at three different attack intensities (light, moderate, or heavy) within seven different tactical targets. This analysis provides an overview of how those casualty estimates were derived and the limitations of the scenarios presented in AMedP-8. Tables VIII-1 through VIII-3, below, summarize the results of this analysis.

Table VIII-1. Summary of Casualty Scenarios, GB

Operational Area		Heavy Brigade, Maneuver Battalions, Movement to Contact		Heavy Brigade, Maneuver Battalions, Offense		Heavy Brigade, Maneuver Battalions, Defense		Heavy Brigade, Brigade Support Area, Movement to Contact		Heavy Brigade, Brigade Support Area, Offense or Defense		Support Brigade		Light Infantry Brigade	
	Length (Km)	40		16		21		40		N/A		10		6	
Sub-Operational Area	Breadth (Km)	20		24		45		20		N/A		7		6	
	Population	4,042		4,042		4,042		4,042		4,042		2,314		3,454	
	Unit	Maneuver Battalion		Maneuver Battalion		Maneuver Battalion		Support Battalion		Support Battalion		N/A		N/A	
	Length (Km)	10		10		15		10		6					
	Breadth (Km)	20		8		15		20		5					
	Population	1,047		1,047		1,047		1,013		1,013					
		Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available
Sarin (GB) Casualties, Artillery/MRLS (Light)	Immediate Fatalities	0	0	0	3	10	9	0	0	2	1	55	5	52	0
	Casualty, Surviving	27	24	36	24	55	36	71	44	92	62	75	30	148	50
	Casualty, Subsequent Fatality	0	0	0	0	3	3	0	5	5	0	0	0	8	0
Sarin (GB) Casualties, Artillery/MRLS (Moderate)	Immediate Fatalities	0	70	4	23	4	27	30	48	45	19	40	90	338	140
	Casualty, Surviving	85	13	123	49	105	44	171	38	232	86	300	100	588	144
	Casualty, Subsequent Fatality	0	2	0	3	0	0	0	14	2	4	15	15	56	20
Sarin (GB) Casualties, Artillery/MRLS (Heavy)	Immediate Fatalities	42	13	74	4	0	53	96	23	46	80	63	155	200	276
	Casualty, Surviving	194	59	148	52	135	60	247	123	257	123	406	80	941	229
	Casualty, Subsequent Fatality	6	0	0	3	4	3	4	7	19	1	25	0	40	27
Sarin (GB) Casualties, Bombs (Light)	Immediate Fatalities	0	0	4	0	0	0	0	0	8	0	0	0	96	0
	Casualty, Surviving	79	21	101	11	93	18	154	33	180	40	270	10	486	10
	Casualty, Subsequent Fatality	0	0	0	0	0	0	0	0	3	0	0	0	10	0
Sarin (GB) Casualties, Bombs (Moderate)	Immediate Fatalities	0	18	44	0	0	11	74	25	4	57	0	35	50	17
	Casualty, Surviving	156	69	142	44	126	32	193	123	321	102	367	60	1030	81
	Casualty, Subsequent Fatality	0	0	0	0	0	4	0	0	8	1	0	10	0	0
Sarin (GB) Casualties, Bombs (Heavy)	Immediate Fatalities	82	18	31	0	0	34	78	4	45	17	85	60	50	86
	Casualty, Surviving	206	69	193	53	128	30	207	70	417	62	390	55	1147	138
	Casualty, Subsequent Fatality	10	0	12	0	0	0	0	0	4	5	15	5	10	30
Sarin (GB) Casualties, TBMs (Light)	Immediate Fatalities	0	0	11	10	0	0	2	0	2	1	20	0	0	10
	Casualty, Surviving	104	16	137	13	94	18	149	40	201	25	290	10	610	30
	Casualty, Subsequent Fatality	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Sarin (GB) Casualties, TBMs (Moderate)	Immediate Fatalities	0	0	4	0	0	4	1	0	13	0	20	0	10	0
	Casualty, Surviving	314	16	279	5	131	4	326	9	519	6	597	10	1383	10
	Casualty, Subsequent Fatality	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Sarin (GB) Casualties, TBMs (Heavy)	Immediate Fatalities	0	0	0	0	4	0	23	17	17	21	60	0	30	10
	Casualty, Surviving	359	27	311	27	150	40	357	84	559	127	664	35	1457	60
	Casualty, Subsequent Fatality	0	0	0	0	8	0	1	0	0	0	0	0	0	0

Table VIII-2. Summary of Casualty Scenarios, VX

Operational Area		Heavy Brigade, Maneuver Battalions, Movement to Contact		Heavy Brigade, Maneuver Battalions, Offense		Heavy Brigade, Maneuver Battalions, Defense		Heavy Brigade, Brigade Support Area, Movement to Contact		Heavy Brigade, Brigade Support Area, Offense or Defense		Support Brigade		Light Infantry Brigade	
	Length (Km)	40		16		21		40		N/A		10		6	
	Breadth (Km)	20		24		45		20		N/A		7		6	
	Population	4,042		4,042		4,042		4,042		4,042		2,314		3,454	
Sub-Operational Area	Unit	Maneuver Battalion		Maneuver Battalion		Maneuver Battalion		Support Battalion		Support Battalion		N/A		N/A	
	Length (Km)	10		10		15		10		6					
	Breadth (Km)	20		8		15		20		5					
	Population	1,047		1,047		1,047		1,013		1,013					
		Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available
VX Casualties, Artillery/MRLS (Light)	Immediate Fatalities	0	0	5	5	3	3	0	0	6	6	95	95	96	96
	Casualty, Surviving	41	41	67	54	57	56	109	108	149	152	140	140	212	212
	Casualty, Subsequent Fatality	0	0	0	0	1	0	0	0	3	0	10	0	0	0
VX Casualties, Artillery/MRLS (Moderate)	Immediate Fatalities	0	0	14	14	13	13	0	0	17	17	50	110	422	422
	Casualty, Surviving	77	35	113	107	93	91	171	171	213	192	185	145	370	300
	Casualty, Subsequent Fatality	0	0	0	6	0	2	0	0	1	1	15	10	10	0
VX Casualties, Artillery/MRLS (Heavy)	Immediate Fatalities	0	0	13	18	11	25	0	12	205	19	55	85	620	686
	Casualty, Surviving	120	117	124	98	118	82	180	163	153	179	285	130	617	308
	Casualty, Subsequent Fatality	0	0	2	5	1	0	0	9	7	0	20	5	30	50
VX Casualties, Bombs (Light)	Immediate Fatalities	0	0	19	19	0	0	8	8	44	44	45	45	88	70
	Casualty, Surviving	75	70	105	102	70	69	131	131	150	150	240	230	494	464
	Casualty, Subsequent Fatality	0	0	3	0	0	0	0	0	0	0	0	0	0	18
VX Casualties, Bombs (Moderate)	Immediate Fatalities	92	92	52	52	4	4	45	45	66	62	150	150	130	120
	Casualty, Surviving	116	72	143	105	125	121	177	177	279	264	325	310	860	832
	Casualty, Subsequent Fatality	0	0	0	0	0	0	0	0	8	8	0	0	0	10
VX Casualties, Bombs (Heavy)	Immediate Fatalities	121	98	53	53	0	0	103	103	175	165	145	140	120	80
	Casualty, Surviving	145	141	192	142	127	121	187	190	259	263	367	360	1078	1021
	Casualty, Subsequent Fatality	10	31	0	0	4	4	3	0	4	10	0	5	30	50
VX Casualties, TBMs (Light)	Immediate Fatalities	25	8	123	7	0	11	165	44	104	20	184	95	188	126
	Casualty, Surviving	419	49	147	23	224	39	104	42	108	12	212	55	383	110
	Casualty, Subsequent Fatality	25	0	9	0	0	0	0	0	2	6	5	5	0	0
VX Casualties, TBMs (Moderate)	Immediate Fatalities	107	0	190	20	126	5	257	39	213	15	644	20	985	0
	Casualty, Surviving	691	26	113	18	223	23	121	28	105	42	247	25	382	30
	Casualty, Subsequent Fatality	4	0	5	0	3	6	6	0	4	0	25	0	7	0
VX Casualties, TBMs (Heavy)	Immediate Fatalities	107	4	175	26	193	33	242	1	220	60	564	85	1191	186
	Casualty, Surviving	584	56	107	31	178	39	111	76	164	89	237	85	339	140
	Casualty, Subsequent Fatality	0	4	13		0	0	15	0	15	6	35	15	34	20

Table VIII-3. Summary of Casualty Scenarios, HD

Operational Area		Heavy Brigade, Maneuver Battalions, Movement to Contact		Heavy Brigade, Maneuver Battalions, Offense		Heavy Brigade, Maneuver Battalions, Defense		Heavy Brigade, Brigade Support Area, Movement to Contact		Heavy Brigade, Brigade Support Area, Offense or Defense		Support Brigade		Light Infantry Brigade	
	Length (Km)	40		16		21		40		N/A		10		6	
	Breadth (Km)	20		24		45		20		N/A		7		6	
	Population	4,042		4,042		4,042		4,042		4,042		2,314		3,454	
Sub-Operational Area	Unit	Maneuver Battalion		Maneuver Battalion		Maneuver Battalion		Support Battalion		Support Battalion		N/A		N/A	
	Length (Km)	10		10		15		10		6					
	Breadth (Km)	20		8		15		20		5					
	Population	1,047		1,047		1,047		1,013		1,013					
		Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available	Protection Unavailable	Protection Available
Distilled Mustard (HD) Casualties, Artillery/MRLS (Light)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	16	9	24	8	15	14	77	10	45	47	25	5	40	20
	Casualty, Subsequent Fatality	0	0	5	0	15	0	0	6	33	2	5	0	20	0
Distilled Mustard (HD) Casualties, Artillery/MRLS (Moderate)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	93	0	136	69	41	0	145	37	172	8	320	0	430	168
	Casualty, Subsequent Fatality	0	0	0	20	2	0	0	11	0	4	0	0	0	58
Distilled Mustard (HD) Casualties, Artillery/MRLS (Heavy)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	298	34	320	35	100	4	325	14	522	109	575	170	1148	274
	Casualty, Subsequent Fatality	21	4	0	6	0	4	8	14	8	53	0	65	0	78
Distilled Mustard (HD) Casualties, Bombs (Light)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	38	38	7	31	11	20	0	57	24	73	5	35	20	80
	Casualty, Subsequent Fatality	0	16	11	6	14	2	15	0	24	33	25	0	40	10
Distilled Mustard (HD) Casualties, Bombs (Moderate)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	62	77	16	75	17	76	71	136	10	178	45	140	40	210
	Casualty, Subsequent Fatality	0	8	36	9	43	12	13	0	87	22	70	30	150	40
Distilled Mustard (HD) Casualties, Bombs (Heavy)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	32	63	17	80	10	93	22	97	19	153	30	205	56	346
	Casualty, Subsequent Fatality	45	1	29	10	34	15	13	49	64	73	155	20	172	52
Distilled Mustard (HD) Casualties, TBMs (Light)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	27	20	4	17	28	18	39	33	41	40	20	25	30	30
	Casualty, Subsequent Fatality	0	0	0	0	2	0	0	0	52	0	20	5	38	0
Distilled Mustard (HD) Casualties, TBMs (Moderate)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	40	9	54	4	29	8	81	25	95	20	65	10	130	35
	Casualty, Subsequent Fatality	2	0	7	0	8	0	0	0	43	0	25	5	70	15
Distilled Mustard (HD) Casualties, TBMs (Heavy)	Immediate Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Casualty, Surviving	23	9	80	17	47	8	132	25	136	20	85	10	66	35
	Casualty, Subsequent Fatality	25	0	14	4	3	2	0	0	4	0	90	0	112	15

IX. RECOMMENDATIONS AND CONCLUSIONS

A. RECOMMENDATIONS FOR FUTURE VERSIONS OF AMedP-8 CHEMICAL

Upon the review and analysis performed to document the production of AMedP-8 Chemical, it became clear that several points were open to revision with the production of a new AMedP-8 in the future. The objective of any revisions to AMedP-8 should be to significantly add to the value of the information provided by making that information more accessible and applicable, and/or to extend the information to more situations of interest.

Making information in AMedP-8 more accessible implies changing either the way the information is presented or the format of the document. Currently, the information is presented in a series of tables formatted to permit printing as hard copies. Some reformatting suggestions are:

- Use hypertext to improve user access to information. This would retain the tabular format of the information, but make the electronic access to the data faster by a user interface, which requires a minimum of information to have the desired table display on the screen.
- Incorporate graphical presentation of data. This would supplement the tables with graphs. Some information is easier to grasp graphically. Of course, some information is difficult to graph. Implementing this change could significantly increase the size of AMedP-8. The challenge to the AMedP-8 Custodian is to determine the optimum balance and structure of graphical and tabular data presentation.
- Include supporting algorithms. This would allow the AMedP-8 user to algorithmically estimate performance fraction, fraction ill, time of onset, or time of death for any given exposure level. The difficulty in implementing this change is that there are currently no simple underlying algorithms for the information presented in AMedP-8. Deriving or developing supporting algorithms is associated with significant risk.
- Include supplementary software. This would allow the AMedP-8 user to estimate casualties for a multitude of situations. The difficulty in implementing this format change is that there is currently no generic software that does this. The closest available tool is the Casualty Estimation (CE) module of the NBC Casualty Resource Estimation Support Tool (CREST). If that is not acceptable, it would most likely be very difficult to develop a completely new software tool that adequately responds to the AMedP-8 users' requirements.

IDA recognizes that AMedP-8 is directly applicable to only the limited number of specific scenarios presented. To make information in AMedP-8 more applicable implies adding more information that responds directly to the specific technical requirements of AMedP-6 and AMedP-7. This additional information could be a compilation of the medical treatment

requirements (from AMedP-6) as applicable to the casualties in AMedP-8, or the derivation of the analytic tools of AMedP-7, which depend on the casualty estimates expressed in AMedP-8.

The scenarios used in AMedP-8 are also limited in extent and applicability. The current AMedP-8 estimates casualties from a limited number of applications of military weapons against a limited selection of deployed military force scenarios. Extending the information in AMedP-8 to more situations of interest is one way to expand the utility of AMedP-8. Additional situations could include:

- Additional degrees of injury (negligible, moderate, severe, fatal) subcategories to a “casualty” definition. Each type of injury correlates to specific ranges of insults, which in turn drive medical system requirements. For example, in the “Severe Injury” category, personnel survive but require skilled medical care for 6 weeks or longer.
- Additional types of chemical agents
- Additional types of munitions and delivery systems (such as aerosol dissemination of GB, for example)
- Multiple attacks on single units
- Additional military deployment scenarios
- Additional environments for military operations (urban, forest, etc.)
- Terrorist use of chemical weapons against deployed military forces
- Military and/or terrorist use of chemical weapons against civilian populations
- Expanded demographic characterization of population
- Impact of protective measures and responses
 - Physical protection, especially from tents, vehicles, etc.
 - Medical protection
 - Technical detection and medical surveillance
 - Decontamination
 - Medical care.

AMedP-8 Chemical uses models developed by PSR to assess the effects of chemical exposure on individuals. These models are based on a series of assumptions and limited data available for GB and HD (none for VX), as elaborated in the above sections. The next version of AMedP-8 Chemical should consider changes to these models to more closely reflect the reality of chemical exposure. For example, the models should take into account the differences between nerve agent effects (GB vs. VX), including varying systemic profiles of liquid and vapor exposure. As a second example, the current HD model is based on instantaneous exposures and does not consider the duration of exposure in determining symptoms. Other models of exposure should be considered for future versions, such as the toxic load model, which considers the impact of duration of exposure on associated effects.

B. CONCLUSIONS

AMedP-8 Chemical added, for the first time, chemical casualty estimation to NATO's medical and operational NBC capabilities. Building on the methodology and format developed and used in AMedP-8 Nuclear, it quantifies casualties by degree of exposure, and describes the injuries and their effect on personnel performance by time period. While further work should be pursued to improve its utility, AMedP-8 Chemical is a significant step toward preparedness for chemical warfare and terrorism. The documentation of AMedP-8 Chemical will provide a starting point for future revisions and will help users better understand its capabilities and limitations.

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APPENDIX A

HEAVY BRIGADE, FORWARD MANEUVER BATTALION, MOVEMENT TO CONTACT

Appendix A. Heavy Brigade, Forward Maneuver Battalion, Movement to Contact

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Bde HQ	HHC		Cmd Sec	Tac CP	1 M113	829	6+2	Fwd	Tank Bn Task Force
				Main CP	2 HMMWV	* 807	1	Bde HHC	BSA Task Force
						* 808	1	Bde HHC	BSA Task Force
			S-1 Sec	Rear CP	2 HMMWV	* 747	3	FSB	BSA Task Force
						* 759	4	FSB	BSA Task Force
			S-2 Sec	Main CP	1 M557	* 819	4	Bde HHC	BSA Task Force
					2 HMMWV	* 748	3	Bde HHC	BSA Task Force
						* 749	3	Bde HHC	BSA Task Force
			S-3 Sec	Tac CP	1 M577	822	4+2+2	Fwd	Tank Bn Task Force
				Main CP	2 M577	* 817	5	Bde HHC	BSA Task Force
						* 818	5	Bde HHC	BSA Task Force
					3 HMMWV	* 750	2	Bde HHC	BSA Task Force
						* 751	2	Bde HHC	BSA Task Force
						* 752	2	Bde HHC	BSA Task Force
			Bde FSE Sec (Carried on Arty Bn TOE)		1 HMMWV	* 753	2	Bde HHC	BSA Task Force
					1 M577	* 821	2	Bde HHC	BSA Task Force
			Tac CP Sec	TAC CP	2 riding in APC in S-3 Sec				BSA Task Force
				Main CP	1 HMMWV	* 754	2	Bde HHC	BSA Task Force
			Bde Eng Sec	Main CP (Carried on Eng Bn TOE)	1 M577	* 820	4	Bde HHC	BSA Task Force
				Main CP (Carried on AD Bn TOE)	1 HMMWV	* 758	3	Bde HHC	BSA Task Force
			Fast Sec	Rear CP (Carried on MI Bn TOE)	1 HMMWV	* 809	2	FSB	BSA Task Force
				Main CP	1 HMMWV	* 769	2	Bde HHC	BSA Task Force
			S-4 Sec	Rear CP	1 M577	* 812	5	FSB	BSA Task Force
				Main CP	1 HMMWV	* 756	2	Bde HHC	BSA Task Force
			Co HQ	Rear CP	1 HMMWV	* 755	2	FSB	BSA Task Force
					1 Truck	* 874	3	FSB	BSA Task Force
			Commo Sec	Main CP	3HMMWV	* 757	4	Bde HHC	BSA Task Force
						* 779	3	Bde HHC	BSA Task Force
						* 796	2	Bde HHC	BSA Task Force
				Rear CP	1 HMMWV	* 797	1	Bde HHC	BSA Task Force
			Maint Sec	Main CP	1 M577	* 811	3	FSB	BSA Task Force
				Main CP	1 M578	* 884	3	FSB	BSA Task Force
					4 M88A1	* 824	3	FSB	BSA Task Force
						* 825	3	FSB	BSA Task Force
						* 826	3	FSB	BSA Task Force
						* 827	3	FSB	BSA Task Force
						* 876	4	FSB	BSA Task Force
				Rear CP	2 Truck	* 869	3	FSB	BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section Mess Sec	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
					1 Truck	* 875	5	FSB	BSA Task Force
Mech Inf Bn 1	HHC								
			Bn HQ Sec						
				Tac CP	1 M2	336	5	Fwd	Mech Inf Bn 1 Task Force
				Main CP	2 HMMWV	261	2	Bn HHC	Mech Inf Bn 1 Task Force
						262	1	Bn HHC	Mech Inf Bn 1 Task Force
			S-1 Sec		1 HMMWV	269	5	Cbt Train	Mech Inf Bn 1 Task Force
					1 Truck	* 416	4	Fld Train	BSA Task Force
			S-2 Sec						
				Tac CP	1 riding in APC in S-3 Sec				Mech Inf Bn 1 Task Force
				Main CP	1 M577	345	4	Bn HHC	Mech Inf Bn 1 Task Force
			S-3 Sec						
				Tac CP	1 M2	337	3	Fwd	Mech Inf Bn 1 Task Force
					1 M113	374	1+1+2	Fwd	Mech Inf Bn 1 Task Force
				Main CP	1 M577	344	6	Bn HHC	Mech Inf Bn 1 Task Force
					3 HMMWV	263	2	Bn HHC	Mech Inf Bn 1 Task Force
						264	2	Bn HHC	Mech Inf Bn 1 Task Force
						270	2	Bn HHC	Mech Inf Bn 1 Task Force
			FSE Sec (Carried on Arty Bn TOE)						
					1 HMMWV	803	2	Bn HHC	Mech Inf Bn 2 Task Force
					1 Colt	838	2	Bn HHC	Mech Inf Bn 1 Task Force
			Tac CP Sec						
				Tac CP	2 riding in APC in S-3 Sec				
				Main CP	1 HMMWV	265	2	Bn HHC	Mech Inf Bn 1 Task Force
			S-4 Sec						
				Cbt Tms CP	1 M577	351	2	Cbt Train	Mech Inf Bn 1 Task Force
					1 HMMWV	267	2	Cbt Train	Mech Inf Bn 1 Task Force
					2 ride in spt plt veh/HMMWV of HQ Sec				
			Co HQ						
				Main CP	1 HMMWV	268	2	Bn HHC	Mech Inf Bn 1 Task Force
				Fld Tms CP	1 HMMWV	* 276	2	Fld Train	BSA Task Force
					2 Truck	* 415	2	Fld Train	BSA Task Force
						* 441	1	Fld Train	BSA Task Force
		Bn Commo Plt							
				Main CP	2 HMMWV	271	2	Bn HHC	Mech Inf Bn 1 Task Force
						266	2	Bn HHC	Mech Inf Bn 1 Task Force
				Cbt Tms CP	1 M577	350	3	Cbt Train	Mech Inf Bn 1 Task Force
					1 HMMWV	272	1	Cbt Train	Mech Inf Bn 1 Task Force
					3 CYCLE	291	1	Cbt Train	Mech Inf Bn 1 Task Force
						292	1	Cbt Train	Mech Inf Bn 1 Task Force
						293	1	Cbt Train	Mech Inf Bn 1 Task Force
		Bn Scout Plt							
			HQ Sec						
					2 M3	338	5	Fwd	Mech Inf Bn 1 Task Force
						341	5	Fwd	Mech Inf Bn 1 Task Force
			Scout Sec						
					4 M3	342	5	Fwd	Mech Inf Bn 1 Task Force
						343	5	Fwd	Mech Inf Bn 1 Task Force
						339	5	Fwd	Mech Inf Bn 1 Task Force
						340	5	Fwd	Mech Inf Bn 1 Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area		
Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ	6 Mortar Sqds	2 HMMWV	259	2	Bn Rear	Mech Inf Bn 1 Task Force		
					260	1	Bn Rear	Mech Inf Bn 1 Task Force			
			Mort Sec HQ		2 M577	346	3	Bn Rear	Mech Inf Bn 1 Task Force		
					347	3	Bn Rear	Mech Inf Bn 1 Task Force			
			6 4.2 MTR		460	4	Bn Rear	Mech Inf Bn 1 Task Force			
					461	4	Bn Rear	Mech Inf Bn 1 Task Force			
					462	4	Bn Rear	Mech Inf Bn 1 Task Force			
					463	4	Bn Rear	Mech Inf Bn 1 Task Force			
					464	4	Bn Rear	Mech Inf Bn 1 Task Force			
					465	4	Bn Rear	Mech Inf Bn 1 Task Force			
			Bn Med Plt		Plt HQ	1 HMMWV	273	2	Cbt Train	Mech Inf Bn 1 Task Force	
						2 Trucks (2 in 1 icon)	442	2	Cbt Train	Mech Inf Bn 1 Task Force	
					Aid Station	2 M577-AMB	488	4	Cbt Train	Mech Inf Bn 1 Task Force	
						489	3	Cbt Train	Mech Inf Bn 1 Task Force		
					Evac Sec	1 M577-AMB	490	3	Cbt Train	Mech Inf Bn 1 Task Force	
						7 M113-AMB (7 in 1 icon)	491	14	Cbt Train	Mech Inf Bn 1 Task Force	
					Bn Sprt Plt	HQ Sec	1 HMMWV	* 288	3+2	Fld Train	BSA Task Force
			Trns Sec			4 Trucks (4 in 1 icon)	* 434	4	Fld Train	BSA Task Force	
						5 HEMMT C (5 in 1 icon)	* 484	5	Fld Train	BSA Task Force	
		4 HEMMT P (4 in 1 icon)		* 486		4	Fld Train	BSA Task Force			
		Class III & V Team	8 HEMMT C (4 in 1 icon)	* 482		8	Fld Train	BSA Task Force			
				* 483		4	Fld Train	BSA Task Force			
			4 HEMMT P (4 in 1 icon)	* 485		4	Fld Train	BSA Task Force			
		Mess Sec	1 Truck	* 435		2	Fld Train	BSA Task Force			
			4 Trucks (4 in 1 icon)	* 433		12	Fld Train	BSA Task Force			
		Plt HQ									
		Admin Sec	2 HMMWV	275		1	Maint	Mech Inf Bn 1 Task Force			
				277		1	Maint	Mech Inf Bn 1 Task Force			
		Bn Maint Plt (cont.)	Maint/SVC Sec	1 HMMWV		* 274	1	Fld Train	BSA Task Force		
				7 Trucks		* 437	1	Fld Train	BSA Task Force		
						* 428	1	Fld Train	BSA Task Force		
						* 417	1	Fld Train	BSA Task Force		
					436	1	Maint	Mech Inf Bn 1 Task Force			
					438	1	Maint	Mech Inf Bn 1 Task Force			
					439	1	Maint	Mech Inf Bn 1 Task Force			
					440	2	Maint	Mech Inf Bn 1 Task Force			
				Sprt Sec							
				2 5 ton wrecker	* 480	1	Fld Train	BSA Task Force			
					* 481	1	Fld Train	BSA Task Force			
				1 Truck	418	2	Maint	Mech Inf Bn 1 Task Force			
				3 M88A1	357	2	Maint	Mech Inf Bn 1 Task Force			
					358	2	Maint	Mech Inf Bn 1 Task Force			
					352	2	Maint	Mech Inf Bn 1 Task Force			
				1 HEMMT W	487	1	Maint	Mech Inf Bn 1 Task Force			

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
				4 Rifle Co Maint Teams	1 HMMWV	278	2	Maint	Mech Inf Bn 1 Task Force
					1 M113	373	2	Maint	Mech Inf Bn 1 Task Force
					4 Trucks	420	3	Maint	Mech Inf Bn 1 Task Force
						422	4	Maint	Mech Inf Bn 1 Task Force
						421	5	Maint	Mech Inf Bn 1 Task Force
						419	6	Maint	Mech Inf Bn 1 Task Force
					1 Truck for 16 Maint Vehicles	424	2	Maint	Mech Inf Bn 1 Task Force
					4 M88A1	353	3	Maint	Mech Inf Bn 1 Task Force
						356	3	Maint	Mech Inf Bn 1 Task Force
						354	3	Maint	Mech Inf Bn 1 Task Force
						355	3	Maint	Mech Inf Bn 1 Task Force
					4 M113	369	4	Maint	Mech Inf Bn 1 Task Force
						370	4	Maint	Mech Inf Bn 1 Task Force
						371	4	Maint	Mech Inf Bn 1 Task Force
						372	4	Maint	Mech Inf Bn 1 Task Force
					8 Trucks (2 in 1 icon)	429	4	Maint	Mech Inf Bn 1 Task Force
						430	4	Maint	Mech Inf Bn 1 Task Force
						431	4	Maint	Mech Inf Bn 1 Task Force
						432	4	Maint	Mech Inf Bn 1 Task Force
				AA Co Maint Team	1 M113	368	6	Maint	Mech Inf Bn 1 Task Force
					1 Truck	425	2	Maint	Mech Inf Bn 1 Task Force
	Rifle Co 1		HQ		2 M2	73	3	line	Tank Bn Task Force
						74	3	line	Tank Bn Task Force
					1 M113	131	2	Co rear	Tank Bn Task Force
					2 HMMWV	43	1	Co rear	Tank Bn Task Force
						44	2	Co rear	Tank Bn Task Force
					2 Trucks	157	1	Co rear	Tank Bn Task Force
						155	2	Co rear	Tank Bn Task Force
				Rifle Plt 1	4 M2	93	9	line	Tank Bn Task Force
						94	9	line	Tank Bn Task Force
						96	9	line	Tank Bn Task Force
						97	9	line	Tank Bn Task Force
				Rifle Plt 2	4 M2	98	9	line	Tank Bn Task Force
						100	9	line	Tank Bn Task Force
						89	9	line	Tank Bn Task Force
						91	9	line	Tank Bn Task Force
				Rifle Plt 3	4 M2	92	9	line	Tank Bn Task Froce
						95	4	line	Tank Bn Task Froce
						99	4	line	Tank Bn Task Froce
						90	4	line	Tank Bn Task Froce
	Rifle Co 2		HQ		2 M2	75	3	line	Tank Bn Task Force
						76	3	line	Tank Bn Task Force
					1 M113	132	2	Co rear	Tank Bn Task Force
					2 HMMWV	45	1	Co rear	Tank Bn Task Force
						46	2	Co rear	Tank Bn Task Force
					2 Trucks	156	1	Co rear	Tank Bn Task Force
						158	2	Co rear	Tank Bn Task Force
				Rifle Plt 1	4 M2	81	9	line	Tank Bn Task Force
						82	9	line	Tank Bn Task Force
						84	9	line	Tank Bn Task Force
						85	9	line	Tank Bn Task Force
				Rifle Plt 2	4 M2	86	9	line	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
						88	9	line	Tank Bn Task Force
						77	9	line	Tank Bn Task Force
						78	9	line	Tank Bn Task Force
		Rifle Plt 3			4 M2	80	9	line	Tank Bn Task Force
						87	4	line	Tank Bn Task Force
						79	4	line	Tank Bn Task Force
						83	4	line	Tank Bn Task Force
	Rifle Co 3		HQ		2 M2	294	3	line	Mech Inf Bn 1 Task Force
						295	3	line	Mech Inf Bn 1 Task Force
				1 M113		375	2	Co rear	Mech Inf Bn 1 Task Force
				2 HMMWV		250	1	Co rear	Mech Inf Bn 1 Task Force
						251	2	Co rear	Mech Inf Bn 1 Task Force
				2 Truck		405	1	Co rear	Mech Inf Bn 1 Task Force
						407	2	Co rear	Mech Inf Bn 1 Task Force
		Rifle Plt 1			4 M2	321	9	line	Mech Inf Bn 1 Task Force
						319	9	line	Mech Inf Bn 1 Task Force
						318	9	line	Mech Inf Bn 1 Task Force
						310	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 2			4 M2	311	9	line	Mech Inf Bn 1 Task Force
						313	9	line	Mech Inf Bn 1 Task Force
						314	9	line	Mech Inf Bn 1 Task Force
						315	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 3			4 M2	317	9	line	Mech Inf Bn 1 Task Force
						320	4	line	Mech Inf Bn 1 Task Force
						312	4	line	Mech Inf Bn 1 Task Force
						316	4	line	Mech Inf Bn 1 Task Force
	Rifle Co 4		HQ		2 M2	308	3	line	Mech Inf Bn 1 Task Force
						309	3	line	Mech Inf Bn 1 Task Force
				1 M113		376	2	Co rear	Mech Inf Bn 1 Task Force
				2 HMMWV		248	1	Co rear	Mech Inf Bn 1 Task Force
						249	2	Co rear	Mech Inf Bn 1 Task Force
				2 Trucks		404	1	Co rear	Mech Inf Bn 1 Task Force
						406	2	Co rear	Mech Inf Bn 1 Task Force
		Rifle Plt 1			4 M2	296	9	line	Mech Inf Bn 1 Task Force
						297	9	line	Mech Inf Bn 1 Task Force
						299	9	line	Mech Inf Bn 1 Task Force
						300	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 2			4 M2	301	9	line	Mech Inf Bn 1 Task Force
						303	9	line	Mech Inf Bn 1 Task Force
						304	9	line	Mech Inf Bn 1 Task Force
						305	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 3			4 M2	307	9	line	Mech Inf Bn 1 Task Force
						298	4	line	Mech Inf Bn 1 Task Force
						302	4	line	Mech Inf Bn 1 Task Force
						306	4	line	Mech Inf Bn 1 Task Force
	AA Co		HQ		1 M113	381	4	line	Mech Inf Bn 1 Task Force
					2 HMMWV	286	2	Co rear	Mech Inf Bn 1 Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area				
Mech Inf Bn 2	HHC	AA Plt			3 M113	287	2	Co rear	Mech Inf Bn 1 Task Force				
						378	3	line	Mech Inf Bn 1 Task Force				
						379	3	line	Mech Inf Bn 1 Task Force				
					12 ITV-TOW	380	3	line	Mech Inf Bn 1 Task Force				
						383	4	line	Mech Inf Bn 1 Task Force				
						384	4	line	Mech Inf Bn 1 Task Force				
						385	4	line	Mech Inf Bn 1 Task Force				
						386	4	line	Mech Inf Bn 1 Task Force				
						387	4	line	Mech Inf Bn 1 Task Force				
						388	4	line	Mech Inf Bn 1 Task Force				
						389	4	line	Mech Inf Bn 1 Task Force				
						390	4	line	Mech Inf Bn 1 Task Force				
					391	4	line	Mech Inf Bn 1 Task Force					
					392	4	line	Mech Inf Bn 1 Task Force					
					393	4	line	Mech Inf Bn 1 Task Force					
		394	4	line	Mech Inf Bn 1 Task Force								
		Bn HQ Sec	Tac CP	1 M2	595	5	Fwd	Mech Inf Bn 2 Task Force					
				Main CP	2 HMMWV	510	2	Bn HHC	Mech Inf Bn 2 Task Force				
			S-1 Sec			511	1	Bn HHC	Mech Inf Bn 2 Task Force				
						1 HMMWV	548	5	Cbt Train	Mech Inf Bn 2 Task Force			
						1 Truck	* 694	4	Fld Train	BSA Task Force			
			S-2 Sec										
			S-3 Sec	Main CP	1 M577	609	4	Bn HHC	Mech Inf Bn 2 Task Force				
					Tac CP	1 M2	594	3	Fwd	Mech Inf Bn 2 Task Force			
				Main CP	1 M113	630	1+1+2	Fwd	Mech Inf Bn 2 Task Force				
					1 M577	603	6	Bn HHC	Mech Inf Bn 2 Task Force				
					3 HMMWV	506	2	Bn HHC	Mech Inf Bn 2 Task Force				
					512	2	Bn HHC	Mech Inf Bn 2 Task Force					
					549	2	Bn HHC	Mech Inf Bn 2 Task Force					
					FSE Sec (Carried on Arty Bn TOE)								
			TACP Sec				1 HMMWV	806	2	Bn HHC	Mech Inf Bn 2 Task Force		
1 Colt	839							2	Bn HHC	Mech Inf Bn 2 Task Force			
S-4 Sec							1 HMMWV	516	2	Bn HHC	Mech Inf Bn 2 Task Force		
								1 M577	608	2	Cbt Train	BSA Task Force	
Co HQ							1 HMMWV	507	2	Cbt Train	Mech Inf Bn 2 Task Force		
								1 HMMWV	515	2	Bn HHC	Mech Inf Bn 2 Task Force	
								1 HMMWV	* 521	2	Fld Train	BSA Task Force	
								2 Truck	* 679	2	Fld Train	BSA Task Force	
									* 678	1	Fld Train	BSA Task Force	
Bn Commo Plt								Main CP	2 HMMWV	509	2	Bn HHC	Mech Inf Bn 2 Task Force
										513	2	Bn HHC	Mech Inf Bn 2 Task Force
			Cbt Trns CP			1 M577		610	3	Cbt Train	Mech Inf Bn 2 Task Force		
								1 HMMWV	514	1	Cbt Train	Mech Inf Bn 2 Task Force	
								3 CYCLE	550	1	Cbt Train	Mech Inf Bn 2 Task Force	
									551	1	Cbt Train	Mech Inf Bn 2 Task Force	
									552	1	Cbt Train	Mech Inf Bn 2 Task Force	

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
		Bn Scout Plt	HQ Sec		2 M3	601	5	Fwd	Mech Inf Bn 2 Task Force
						598	5	Fwd	Mech Inf Bn 2 Task Force
			Scout Sec		4 M3	600	5	Fwd	Mech Inf Bn 2 Task Force
						602	5	Fwd	Mech Inf Bn 2 Task Force
						603	5	Fwd	Mech Inf Bn 2 Task Force
						597	5	Fwd	Mech Inf Bn 2 Task Force
		Hvy Mort Plt	Mort Plt HQ		2 HMMWV	527	2	Bn Rear	Mech Inf Bn 2 Task Force
						528	1	Bn Rear	Mech Inf Bn 2 Task Force
			Mort Sec HQ	6 Mortar Squads	2 M577	604	3	Bn Rear	Mech Inf Bn 2 Task Force
						605	3	Bn Rear	Mech Inf Bn 2 Task Force
					6 4.2 MTR	715	4	Bn Rear	Mech Inf Bn 2 Task Force
						716	4	Bn Rear	Mech Inf Bn 2 Task Force
						717	4	Bn Rear	Mech Inf Bn 2 Task Force
						718	4	Bn Rear	Mech Inf Bn 2 Task Force
						719	4	Bn Rear	Mech Inf Bn 2 Task Force
						720	4	Bn Rear	Mech Inf Bn 2 Task Force
		Bn Med Plt	Plt HQ		1 HMMWV	547	2	Cbt Train	Mech Inf Bn 2 Task Force
					2 Trucks (2 in 1 icon)	665	2	Cbt Train	Mech Inf Bn 2 Task Force
			Aid Station		2 M577-AMB	743	4	Cbt Train	Mech Inf Bn 2 Task Force
						744	3	Cbt Train	Mech Inf Bn 2 Task Force
			Evac Sec		1 M577-AMB	746	3	Cbt Train	Mech Inf Bn 2 Task Force
					7 M113-AMB (7 in 1 icon)	745	14	Cbt Train	Mech Inf Bn 2 Task Force
		Bn Sprt Plt	HQ Sec		1 HMMWV	* 508	3+2	Fld Train	BSA Task Force
			Trans Sec		4 Trucks (4 in 1 icon)	* 666	4	Fld Train	BSA Task Force
					5 HEMMT C (5 in 1 icon)	* 739	5	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	* 741	4	Fld Train	BSA Task Force
			Mess Sec	Class III & V Team	8 HEMMT C (4 in 1 icon)	* 738	8	Fld Train	BSA Task Force
						* 737	4	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	* 740	4	Fld Train	BSA Task Force
					1 Truck	* 676	2	Fld Train	BSA Task Force
					4 Trucks (4 in 1 icon)	* 667	12	Fld Train	BSA Task Force
		Bn Maint Plt	Plt HQ		2 HMMWV	519	1	Maint	Mech Inf Bn 2 Task Force
						520	1	Maint	Mech Inf Bn 2 Task Force
		Bn Maint Plt (cont.)	Admin Sec		1 HMMWV	* 518	1	Fld Train	BSA Task Force
					7 Trucks	* 693	1	Fld Train	BSA Task Force
						* 692	1	Fld Train	BSA Task Force
						* 677	1	Fld Train	BSA Task Force
						680	1	Maint	Mech Inf Bn 2 Task Force
						681	1	Maint	Mech Inf Bn 2 Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
						682	1	Maint	Mech Inf Bn 2 Task Force
						684	2	Maint	Mech Inf Bn 2 Task Force
			Spt Sec						
					2 5 ton wrecker	* 735	1	Fld Train	BSA Task Force
						* 736	1	Fld Train	BSA Task Force
					1 Truck	683	2	Maint	Mech Inf Bn 2 Task Force
					3 M88A1	612	2	Maint	Mech Inf Bn 2 Task Force
						613	2	Maint	Mech Inf Bn 2 Task Force
						614	2	Maint	Mech Inf Bn 2 Task Force
					1 HEMMT W	742	1	Maint	Mech Inf Bn 2 Task Force
			Maint/SVC Sec						
					1 Truck	685	5	Maint	Mech Inf Bn 2 Task Force
					1 HMMWV	517	2	Maint	Mech Inf Bn 2 Task Force
					1 M113	620	2	Maint	Mech Inf Bn 2 Task Force
					5 Truck	686	3	Maint	Mech Inf Bn 2 Task Force
						687	4	Maint	Mech Inf Bn 2 Task Force
						688	5	Maint	Mech Inf Bn 2 Task Force
						689	6	Maint	Mech Inf Bn 2 Task Force
				4 Rifle Co Maint Teams	1 Truck for 16 Maint Vehicles	690	2	Maint	Mech Inf Bn 2 Task Force
					4 M88A1	611	3	Maint	Mech Inf Bn 2 Task Force
						615	3	Maint	Mech Inf Bn 2 Task Force
						616	3	Maint	Mech Inf Bn 2 Task Force
						617	3	Maint	Mech Inf Bn 2 Task Force
					4 M113	619	4	Maint	Mech Inf Bn 2 Task Force
						618	4	Maint	Mech Inf Bn 2 Task Force
						639	4	Maint	Mech Inf Bn 2 Task Force
						640	4	Maint	Mech Inf Bn 2 Task Force
					8 Trucks (2 in 1 icons)	662	4	Maint	Mech Inf Bn 2 Task Force
						663	4	Maint	Mech Inf Bn 2 Task Force
						664	4	Maint	Mech Inf Bn 2 Task Force
						696	4	Maint	Mech Inf Bn 2 Task Force
				AA Co Maint Team	1 M113	638	6	Maint	Mech Inf Bn 2 Task Force
					1 Truck	691	2	Maint	Mech Inf Bn 2 Task Force
	Rifle Co 1								
			HQ		2 M2	322	3	line	Mech Inf Bn 1 Task Force
						323	3	line	Mech Inf Bn 1 Task Force
					1 M113	377	2	Co rear	Mech Inf Bn 1 Task Force
					2 HMMWV	289	1	Co rear	Mech Inf Bn 1 Task Force
						290	2	Co rear	Mech Inf Bn 1 Task Force
					2 Truck	443	1	Co rear	Mech Inf Bn 1 Task Force
						444	2	Co rear	Mech Inf Bn 1 Task Force
			Rifle Plt 1		4 M2	324	9	line	Mech Inf Bn 1 Task Force
						325	9	line	Mech Inf Bn 1 Task Force
						327	9	line	Mech Inf Bn 1 Task Force
						328	9	line	Mech Inf Bn 1 Task Force
			Rifle Plt 2		4 M2	329	9	line	Mech Inf Bn 1 Task Force
						330	9	line	Mech Inf Bn 1 Task Force
						332	9	line	Mech Inf Bn 1 Task Force
						333	9	line	Mech Inf Bn 1 Task Force
			Rifle Plt 3		4 M2	335	9	line	Mech Inf Bn 1 Task Force
						326	4	line	Mech Inf Bn 1 Task Force
						331	4	line	Mech Inf Bn 1 Task Force
						334	4	line	Mech Inf Bn 1 Task Force
	Rifle Co 2								
			HQ		2 M2	584	3	line	Mech Inf Bn 2 Task Force
						585	3	line	Mech Inf Bn 2 Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area					
					1 M113	633	2	Co rear	Mech Inf Bn 2 Task Force					
					2 HMMWV	542	1	Co rear	Mech Inf Bn 2 Task Force					
						543	2	Co rear	Mech Inf Bn 2 Task Force					
					2 Truck	695	1	Co rear	Mech Inf Bn 2 Task Force					
						698	2	Co rear	Mech Inf Bn 2 Task Force					
					Rifle Plt 1		4 M2	586	9	line	Mech Inf Bn 2 Task Force			
								588	9	line	Mech Inf Bn 2 Task Force			
								589	9	line	Mech Inf Bn 2 Task Force			
				590				9	line	Mech Inf Bn 2 Task Force				
				Rifle Plt 2		4 M2	592	9	line	Mech Inf Bn 2 Task Force				
							593	9	line	Mech Inf Bn 2 Task Force				
							566	9	line	Mech Inf Bn 2 Task Force				
							568	9	line	Mech Inf Bn 2 Task Force				
				Rifle Plt 3		4 M2	569	9	line	Mech Inf Bn 2 Task Force				
							587	4	line	Mech Inf Bn 2 Task Force				
							591	4	line	Mech Inf Bn 2 Task Force				
		567	4				line	Mech Inf Bn 2 Task Force						
		Rifle Co 3		HQ		2 M2	570	3	line	Mech Inf Bn 2 Task Force				
							571	3	line	Mech Inf Bn 2 Task Force				
						1 M113	632	2	Co rear	Mech Inf Bn 2 Task Force				
						2 HMMWV	540	1	Co rear	Mech Inf Bn 2 Task Force				
							541	2	Co rear	Mech Inf Bn 2 Task Force				
						2 Truck	697	1	Co rear	Mech Inf Bn 2 Task Force				
							699	2	Co rear	Mech Inf Bn 2 Task Force				
						Rifle Plt 1		4 M2	572	9	line	Mech Inf Bn 2 Task Force		
					574				9	line	Mech Inf Bn 2 Task Force			
					575				9	line	Mech Inf Bn 2 Task Force			
					576				9	line	Mech Inf Bn 2 Task Force			
					Rifle Plt 2		4 M2	578	9	line	Mech Inf Bn 2 Task Force			
								579	9	line	Mech Inf Bn 2 Task Force			
								580	9	line	Mech Inf Bn 2 Task Force			
								582	9	line	Mech Inf Bn 2 Task Force			
	Rifle Plt 3					4 M2	583	9	line	Mech Inf Bn 2 Task Force				
		573	4	line			Mech Inf Bn 2 Task Force							
		577	4	line			Mech Inf Bn 2 Task Force							
		581	4	line			Mech Inf Bn 2 Task Force							
	Rifle Co 4		HQ		2 M2	553	3	line	Mech Inf Bn 2 Task Forcem					
						596	3	line	Mech Inf Bn 2 Task Forcem					
					1 M113	631	2	Co rear	Mech Inf Bn 2 Task Forcem					
					2 HMMWV	536	1	Co rear	Mech Inf Bn 2 Task Forcem					
						537	2	Co rear	Mech Inf Bn 2 Task Forcem					
					2 Truck	659	1	Co rear	Mech Inf Bn 2 Task Forcem					
					660	2	Co rear	Mech Inf Bn 2 Task Forcem						
				Mech Inf Bn 2	Rifle Co 4			Rifle Plt 1		4 M2	554	9	line	Mech Inf Bn 2 Task
											556	9	line	Mech Inf Bn 2 Task
											557	9	line	Mech Inf Bn 2 Task
											558	9	line	Mech Inf Bn 2 Task
								Rifle Plt 2			560	9	line	Mech Inf Bn 2 Task
	561	9	line								Mech Inf Bn 2 Task			
	562	9	line								Mech Inf Bn 2 Task			
	564	9	line								Mech Inf Bn 2 Task			
	Rifle Plt 3							565	9	line	Mech Inf Bn 2 Task			
								555	4	line	Mech Inf Bn 2 Task			

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area						
						559 563	4 4	line line	Mech Inf Bn 2 Task Mech Inf Bn 2 Task						
AA Co	AA Co	3 AA Plt	HQ		1 M113	634	4	line	Mech Inf Bn 2 Task						
					2 HMMWV	544 545	2 2	Co rear Co rear	Mech Inf Bn 2 Task Mech Inf Bn 2 Task						
					12 ITV-TOW	3 M113	635	3	line	Mech Inf Bn 2 Task					
							636	3	line	Mech Inf Bn 2 Task					
							637	3	line	Mech Inf Bn 2 Task					
							641	4	line	Mech Inf Bn 2 Task					
							642	4	line	Mech Inf Bn 2 Task					
							643	4	line	Mech Inf Bn 2 Task					
							644	4	line	Mech Inf Bn 2 Task					
							645	4	line	Mech Inf Bn 2 Task					
							656	4	line	Mech Inf Bn 2 Task					
							647	4	line	Mech Inf Bn 2 Task					
							648	4	line	Mech Inf Bn 2 Task					
							649	4	line	Mech Inf Bn 2 Task					
							650	4	line	Mech Inf Bn 2 Task					
							651	4	line	Mech Inf Bn 2 Task					
							652	4	line	Mech Inf Bn 2 Task					
						Tank Bn	HHC	Bn HQ		Tac CP	2 M1	1 2	4 4	Fwd Fwd	Tank Bn Task Force Tank Bn Task Force
										Main CP	1 HMMWV	61	3	Bn HHC	Tank Bn Task Force
										S-1 Sec		1 HMMWV 1 Truck	54 * 173	6 6	Cbt Train Fld Train
S-2 Sec		1 riding in APC in S-3 Sec 1 M577	114	4	Bn HHC						Tank Bn Task Force				
	S-3 Sec	Tac CP	1 M113 1 M577 1 Truck 2 HMMWV	137 113 162 55 62	1+1+2 6 4 2 1					Fwd Bn HHC Bn HHC Bn HHC Bn HHC	Tank Bn Task Force Tank Bn Task Force Tank Bn Task Force Tank Bn Task Force Tank Bn Task Force				
FSE Sec (Carried on Arty Bn TOE)			1 HMMWV 1 Colt	802 837	2 2					Bn HHC Bn HHC	Tank Bn Task Force Tank Bn Task Force				
	TACP Sec	Tac CP	2 riding in APC in S-3 Sec 1 HMMWV	56	1					Bn HHC	Tank Bn Task Force				
S-4 Sec		Main CP	1 M577 1 HMMWV	112 58	2 2					Cbt Train Cbt Train	Tank Bn Task Force Tank Bn Task Force				
		Cbt Trns CP	2 ride in spt plt veh/HMMWV in HQ Sec												
Co HQ		Fld Trns CP													
		Main CP	1 HMMWV	60	2					Bn HHC	Tank Bn Task Force				
		Fld Trns CP	1 HMMWV 1 Truck	* 59 * 161	2 3					Fld Train Fld Train	BSA Task Force BSA Task Force				
	Bn Commo Plt														
		Main CP	2 HMMWV	57	2					Bn HHC	Tank Bn Task Force				

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
				Cbt Tms CP	1 M577	53	1	Bn HHC	Tank Bn Task Force
					3 CYCLE	111	4	Cbt Train	Tank Bn Task Force
						70	1	Cbt Train	Tank Bn Task Force
						71	1	Cbt Train	Tank Bn Task Force
						72	1	Cbt Train	Tank Bn Task Force
		Bn Scout Plt							
			HQ Sec		2 M3	103	5	Fwd	Tank Bn Task Force
						106	5	Fwd	Tank Bn Task Force
			Scout Sec		4 M3	101	5	Fwd	Tank Bn Task Force
						102	5	Fwd	Tank Bn Task Force
						104	5	Fwd	Tank Bn Task Force
						105	5	Fwd	Tank Bn Task Force
		Hvy Mort Plt							
			Mort Plt HQ		2 HMMWV	63	2	Bn Rear	Tank Bn Task Force
						64	1	Bn Rear	Tank Bn Task Force
			Mort Sec HQ		2 M577	109	3	Bn Rear	Tank Bn Task Force
						110	3	Bn Rear	Tank Bn Task Force
				6 Mortar Squads	6 4.2 MTR	201	4	Bn Rear	Tank Bn Task Force
						202	4	Bn Rear	Tank Bn Task Force
						203	4	Bn Rear	Tank Bn Task Force
						204	4	Bn Rear	Tank Bn Task Force
						205	4	Bn Rear	Tank Bn Task Force
						206	4	Bn Rear	Tank Bn Task Force
		Bn Med Plt							
			Plt HQ		1 HMMWV	65	2	Cbt Train	Tank Bn Task Force
			Aid Station		2 Trucks (2 in 1 icon)	194	2	Cbt Train	Tank Bn Task Force
					2 M577-AMB	228	4	Cbt Train	Tank Bn Task Force
						229	3	Cbt Train	Tank Bn Task Force
			Evac Sec		1M577-AMB	230	3	Cbt Train	Tank Bn Task Force
					7 M113-AMB (7 in 1 icon)	231	14	Cbt Train	Tank Bn Task Force
		Bn Spt Plt							
			HQ Sec		1 HMMWV	* 66	3+2	Fld Train	BSA Task Force
			Trans Sec		3 Truck	* 167	2	Fld Train	BSA Task Force
						* 171	1	Fld Train	BSA Task Force
						* 170	1	Fld Train	BSA Task Force
				Ammo Team	1 HEMMT C	* 222	2	Fld Train	BSA Task Force
					9 HEMMT C (9 in 1 icon)	* 223	9	Fld Train	BSA Task Force
		Bn Spt Plt (cont.)		POL Team	1 Truck	* 163	1	Fld Train	BSA Task Force
					2 HEMMT P	* 225	2	Fld Train	BSA Task Force
						* 226	2	Fld Train	BSA Task Force
					10 HEMMT P (10 in 1 icon)	* 224	10	Fld Train	BSA Task Force
				Co Mess Team	3 Trucks (3 in 1 icon)	* 184	12	Fld Train	BSA Task Force
		Bn Maint Plt							
			Plt HQ		2 HMMWV	67	1	Maint	Tank Bn Task Force
						68	1	Maint	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
			Admin Sec		5 Truck	174	1	Maint	Tank Bn Task Force
						175	1	Maint	Tank Bn Task Force
						176	1	Maint	Tank Bn Task Force
						177	1	Maint	Tank Bn Task Force
						178	1	Maint	Tank Bn Task Force
			Rec/Sprt Sec		1 Truck	* 166	2	Fld Train	BSA Task Force
						* 221	1	Fld Train	BSA Task Force
						* 227	1	Fld Train	BSA Task Force
						115	2	Maint	Tank Bn Task Force
						119	2	Maint	Tank Bn Task Force
			CBT Trns		3 M88A1	121	2	Maint	Tank Bn Task Force
			Maint/SVC Sec		1 HMMWV	69	2	Maint	Tank Bn Task Force
						168	2	Maint	Tank Bn Task Force
						172	4	Maint	Tank Bn Task Force
						179	4	Maint	Tank Bn Task Force
						165	4	Maint	Tank Bn Task Force
				4 Tank Co Maint Teams	16 Trucks (4 in 1 icon)	* 169	6	Fld Train	BSA Task Force
						181	16	Maint	Tank Bn Task Force
						182	16	Maint	Tank Bn Task Force
						183	16	Maint	Tank Bn Task Force
						180	16	Maint	Tank Bn Task Force
				Co Trns Element	4 M113	134	4	Maint	Tank Bn Task Force
						136	4	Maint	Tank Bn Task Force
						133	4	Maint	Tank Bn Task Force
						135	4	Maint	Tank Bn Task Force
						116	3	Maint	Tank Bn Task Force
			Tank Co 1		4 M88A1	117	3	Maint	Tank Bn Task Force
						118	3	Maint	Tank Bn Task Force
						120	3	Maint	Tank Bn Task Force
				HQ Sec	2 M1A1	5	4	line	Tank Bn Task Force
						6	4	line	Tank Bn Task Force
						49	2	Co rear	Tank Bn Task Force
						50	2	Co rear	Tank Bn Task Force
						160	2	Co rear	Tank Bn Task Force
			3 Tank Plt		2 HMMWV	50	2	Co rear	Tank Bn Task Force
						160	2	Co rear	Tank Bn Task Force
				12 M1A1		7	4	line	Tank Bn Task Force
						8	4	line	Tank Bn Task Force
						9	4	line	Tank Bn Task Force
						10	4	line	Tank Bn Task Force
						11	4	line	Tank Bn Task Force
						12	4	line	Tank Bn Task Force
						13	4	line	Tank Bn Task Force
						14	4	line	Tank Bn Task Force
						15	4	line	Tank Bn Task Force
						16	4	line	Tank Bn Task Force
			Tank Co 2			17	4	line	Tank Bn Task Force
						18	4	line	Tank Bn Task Force
				HQ Sec	2 M1A1	3	4	line	Tank Bn Task Force
						4	4	line	Tank Bn Task Force
						47	2	Co rear	Tank Bn Task Force
						48	2	Co rear	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
					1 Truck	159	2	Co rear	Tank Bn Task Force
		3 Tank Plt							
					12 M1A1	19	4	line	Tank Bn Task Force
						20	4	line	Tank Bn Task Force
						21	4	line	Tank Bn Task Force
						22	4	line	Tank Bn Task Force
						23	4	line	Tank Bn Task Force
						24	4	line	Tank Bn Task Force
	Tank Co 3					25	4	line	Tank Bn Task Force
						26	4	line	Tank Bn Task Force
						27	4	line	Tank Bn Task Force
						28	4	line	Tank Bn Task Force
						29	4	line	Tank Bn Task Force
						30	4	line	Tank Bn Task Force
	Tank Co 3		HQ Sec						
				2 M1A1		234	4	line	Mech Inf Bn 1 Task Force
						233	4	line	Mech Inf Bn 1 Task Force
				2 HMMWV		246	2	Co rear	Mech Inf Bn 1 Task Force
						247	2	Co rear	Mech Inf Bn 1 Task Force
				1 Truck		445	2	Co rear	Mech Inf Bn 1 Task Force
		3 Tank Plt							
					12 M1A1	232	4	line	Mech Inf Bn 1 Task Force
						233	4	line	Mech Inf Bn 1 Task Force
						236	4	line	Mech Inf Bn 1 Task Force
						237	4	line	Mech Inf Bn 1 Task Force
						238	4	line	Mech Inf Bn 1 Task Force
						239	4	line	Mech Inf Bn 1 Task Force
						240	4	line	Mech Inf Bn 1 Task Force
						241	4	line	Mech Inf Bn 1 Task Force
						242	4	line	Mech Inf Bn 1 Task Force
						243	4	line	Mech Inf Bn 1 Task Force
						244	4	line	Mech Inf Bn 1 Task Force
						245	4	line	Mech Inf Bn 1 Task Force
	Tank Co 4		HQ Sec						
				2 M1A1		503	4	line	Mech Inf Bn 2 Task Force
						504	4	line	Mech Inf Bn 2 Task Force
				2 HMMWV		538	2	Co rear	Mech Inf Bn 2 Task Force
						539	2	Co rear	Mech Inf Bn 2 Task Force
				1 Truck		700	2	Co rear	Mech Inf Bn 2 Task Force
		3 Tank Plt							
					12 M1A1	492	4	line	Mech Inf Bn 2 Task Force
						493	4	line	Mech Inf Bn 2 Task Force
						494	4	line	Mech Inf Bn 2 Task Force
						495	4	line	Mech Inf Bn 2 Task Force
						496	4	line	Mech Inf Bn 2 Task Force
						497	4	line	Mech Inf Bn 2 Task Force
						498	4	line	Mech Inf Bn 2 Task Force
						499	4	line	Mech Inf Bn 2 Task Force
						500	4	line	Mech Inf Bn 2 Task Force
						501	4	line	Mech Inf Bn 2 Task Force
						502	4	line	Mech Inf Bn 2 Task Force
						505	4	line	Mech Inf Bn 2 Task Force
		Chaparral ADA Plt (from Corps)							
			Plt HQ		1 M113	* 828	3	FSB	BSA Task Force
					1 Truck	* 863	2	FSB	BSA Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area				
Air Def Arty Batt			Batt HQ	4 Chaparral Sqds	4 Chaparral	840	4	1 TFA	Tank Bn Task Force				
						841	4	2 TFA	Mech Inf Bn 1 Task Force				
						842	4	3 TFA	Mech Inf Bn 1 Task Force				
						* 843	4	FSB	BSA Task Force				
						MSCS Plt	Plt HQ	1 M577	813	2	FSB	BSA Task Force	
								5 Trucks (5 in 1 icon)	857	10	FSB	BSA Task Force	
								2 HMMWV(2 in 1 icon)	762	4	FSB	BSA Task Force	
												BSA Task Force	
								Motor Maint Sec	1 HMMWV	760	2	FSB	BSA Task Force
									4 Trucks (4 in 1 icon)	853	16	FSB	BSA Task Force
								Sys Maint Sec	3 HMMWV(3 in 1 icon)	766	9	FSB	BSA Task Force
									1 2/2 ton van-shop	888	1	FSB	BSA Task Force
						Gun Plt	3 Gun Plt HQ	3 M113	138	2	1 TF HHC Area	Tank Bn Task Force	
									367	2	2 TF HHC Area	Mech Inf Bn 1 Task Force	
								* 830	2	Bde HHC	BSA Task Force		
								3 HMMWV	52	2	1 TF HHC Area	Tank Bn Task Force	
									280	2	2 TF HHC Area	Mech Inf Bn 1 Task Force	
								* 764	2	Bde HHC	BSA Task Force		
								9 Gun Sqds	9 Vulcans (4 each)	139	4	1 TFA	Tank Bn Task Force
										140	4	1 TFA	Tank Bn Task Force
										141	4	1 TFA	Tank Bn Task Force
										395	4	2 TFA	Mech Inf Bn 1 Task Force
										396	4	2 TFA	Mech Inf Bn 1 Task Force
										397	4	2 TFA	Mech Inf Bn 1 Task Force
										* 834	4	Bde HHC	BSA Task Force
										* 835	4	FSB	BSA Task Force
									* 836	4	FSB	BSA Task Force	
								Missile Plt	Missile Plt HQ	2 Truck	* 866	1	FSB
							* 867			1	FSB	BSA Task Force	
						1 HMMWV	* 763			3	FSB	BSA Task Force	
						4 Missile Sec	4 HMMWV			51	3	1 TF HHC Area	Tank Bn Task Force
										279	3	2 TF HHC Area	Mech Inf Bn 1 Task Force
										546	3	3 TF HHC Area	Mech Inf Bn 2 Task Force
										765	3	Bde HHC	Mech Inf Bn 2 Task Force
						Air Def Arty Batt (cont.)	20 Missile Teams			20 HMMWV armed w/Stinger	187	2	1 TFA Co
								188	2		1 TF HHC Area	Tank Bn Task Force	
								189	2		1 TFA Co	Tank Bn Task Force	
								190	2		1 TFA Co	Tank Bn Task Force	
								191	2		1 TFA Co	Tank Bn Task Force	
								446	2		2 TFA Co	Mech Inf Bn 1 Task Force	
								447	2		2 TFA Co	Mech Inf Bn 1 Task Force	
								448	2		2 TFA Co	Mech Inf Bn 1 Task Force	
								449	2		2 TF HHC Area	Mech Inf Bn 1 Task Force	
								450	2		2 TFA Co	Mech Inf Bn 1 Task Force	
								701	2		3 TF HHC Area	Mech Inf Bn 2 Task Force	
								702	2		3 TFA Co	Mech Inf Bn 2 Task Force	
								703	2		3 TFA Co	Mech Inf Bn 2 Task Force	

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fwd Spt Bn	HQ & HQ Detachment		Commd Sec		2 HMMWV	704	2	3 TFA Co	Mech Inf Bn 2 Task Force
						705	2	3 TFA Co	Mech Inf Bn 2 Task Force
						* 878	2	Bde HHC	BSA Task Force
						* 879	2	FSB	BSA Task Force
						* 880	2	FSB	BSA Task Force
						* 881	2	FSB	BSA Task Force
						* 882	2	FSB	BSA Task Force
	Supply Co		Co HQ		2 HMMWV	* 895	5	FSB	BSA Task Force
						* 896	5	FSB	BSA Task Force
						2 Truck	4	FSB	BSA Task Force
						* 946	4	FSB	BSA Task Force
						* 947	4	FSB	BSA Task Force
						1 5 ton wrecker	1	FSB	BSA Task Force
						* 983	1	FSB	BSA Task Force
	Ordnance Co		Class V (ATP) Sec		1 HMMWV	* 897	3	FSB	BSA Task Force
			Petroleum Sec		2 Semi-trailer flatbed	* 898	7	FSB	BSA Task Force
						* 987	7	FSB	BSA Task Force
			Co HQ		10 Semi-trailer POL (10in1 icon)	* 899	4	FSB	BSA Task Force
						* 948	3	FSB	BSA Task Force
			Supply Plt HQ		1 HMMWV	* 975	2	FSB	BSA Task Force
						* 974	2	FSB	BSA Task Force
						* 979	2	FSB	BSA Task Force
						* 899	4	FSB	BSA Task Force
						* 948	3	FSB	BSA Task Force
			Supply Sec		1 HMMWV	* 977	10	FSB	BSA Task Force
						* 902	2	FSB	BSA Task Force
						* 937	1	FSB	BSA Task Force
						* 938	1	FSB	BSA Task Force
						* 939	1	FSB	BSA Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
					4 Truck (4 in 1 icon)	* 943	16	FSB	BSA Task Force
					2 HMMWV	* 907	6	FSB	BSA Task Force
						* 904	6	FSB	BSA Task Force
			Maint Control Sec		2 Semi-trailer van	* 980	2	FSB	BSA Task Force
						* 978	2	FSB	BSA Task Force
					2 HMMWV	* 906	3	FSB	BSA Task Force
						* 920	3	FSB	BSA Task Force
					1 5 ton van exp	* 993	3	FSB	BSA Task Force
			Class IX Spt Sec		6 Semi-trailer flatbed (6in1 icon)	* 976	6	FSB	BSA Task Force
					6 Semi-trailer van (6 in 1 icon)	* 981	6	FSB	BSA Task Force
					12 Truck (12 in 1 icon)	* 950	12	FSB	BSA Task Force
		Aumtv/Armt Plt	Plt HQ		1 HMMWV	* 908	2	FSB	BSA Task Force
			Autmv Maint Rep Sec		2 2/2 ton van	* 996	7	FSB	BSA Task Force
						* 994	8	FSB	BSA Task Force
			Armt Maint Rep Sec		2 Truck	* 949	2	FSB	BSA Task Force
						* 951	2	FSB	BSA Task Force
					1 HMMWV	* 909	2	FSB	BSA Task Force
					3 2/2 ton vans (3 in 1 icon)	* 992	6	FSB	BSA Task Force
				Arty Spt Team	1 M113	* 935	3	FSB	BSA Task Force
					3 Truck	* 952	3	FSB	BSA Task Force
						* 954	3	FSB	BSA Task Force
						* 953	3	FSB	BSA Task Force
					1 HMMWV	* 914	3	FSB	BSA Task Force
				Eng System Spt Team	1 2/2 ton van	* 997	2	FSB	BSA Task Force
					2 M113	* 934	2	FSB	BSA Task Force
						* 936	2	FSB	BSA Task Force
					3 Truck	* 956	2	FSB	BSA Task Force
						* 957	2	FSB	BSA Task Force
						* 958	2	FSB	BSA Task Force
					1 2/2 ton van	* 988	2	FSB	BSA Task Force
					1 5 ton wrecker	* 986	1	FSB	BSA Task Force
					2 HMMWV	* 913	2	FSB	BSA Task Force
						* 911	2	FSB	BSA Task Force
		Grd Spt Equip Plt	Plt HQ		1 HMMWV	* 912	2	FSB	BSA Task Force
			Svc/Recovery Sec		1 Truck	* 959	9	FSB	BSA Task Force
					2 5-ton wrecker	* 984	2	FSB	BSA Task Force
						* 985	2	FSB	BSA Task Force
			Grd Spt Equip Rep Sec		1 Truck	* 955	4	FSB	BSA Task Force
						* 960	4	FSB	BSA Task Force
			Elect Equip Rep Sec		6 Truck	* 961	1	FSB	BSA Task Force
						* 962	1	FSB	BSA Task Force
						* 963	1	FSB	BSA Task Force
						* 964	1	FSB	BSA Task Force
						* 965	1	FSB	BSA Task Force
						* 966	1	FSB	BSA Task Force
					1 HMMWV	* 918	4	FSB	BSA Task Force
			MSL Maint Rep Sec		4 HMMWV	* 917	3	FSB	BSA Task Force
						* 918	3	FSB	BSA Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area													
Eng Bn	Medical Co		Co HQ		1 Truck	* 916 * 919 * 967	3 2 1	FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force													
					2 Trucks	* 940 * 941	4 4	FSB FSB	BSA Task Force BSA Task Force													
					2 HMMWV	* 903 * 901	4 4	FSB FSB	BSA Task Force BSA Task Force													
					1 5 ton wrecker	* 982	2	FSB	BSA Task Force													
					Trmt Plt	Plt HQ		1 HMMWV	* 900	2	FSB	BSA Task Force										
								1 Truck	* 942	2	FSB	BSA Task Force										
								2 Treatment Sqds	4 M577	* 929 * 930 * 931 * 932	4 4 4 4	FSB FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force BSA Task Force									
									Area Suppt Sqd	1 5 ton van expansible	* 989	4	FSB	BSA Task Force								
									Treatment Sqd, Area	2 5 ton van expansible	* 990 * 991	4 4	FSB FSB	BSA Task Force BSA Task Force								
									Patient Holding Sqd	2 Truck	* 944 * 945	2 2	FSB FSB	BSA Task Force BSA Task Force								
								Amb. Plt	Plt HQ		1 HMMWV	* 905	2	FSB	BSA Task Force							
											4 HMMWV-AMB (4 in 1 icon)	* 998	8	FSB	BSA Task Force							
											3 Ambl Sqds, track	* 999	12	FSB	BSA Task Force							
											HHQ	Commnd Sec		1 M113	* 831	5	FSB	BSA Task Force				
														1 HMMWV	* 777	4	FSB	BSA Task Force				
														Co HQ	2 Trucks (2 in 1 icon)	* 860	4	FSB	BSA Task Force			
															1 HMMWV	* 770	2	FSB	BSA Task Force			
														Admin/Log Sec	2 HMMWV	* 771 * 772	4+3 4+4	FSB FSB	BSA Task Force BSA Task Force			
															Op/Planning Sec	2 M577 (2 in 1 icon)	* 814	6	FSB	BSA Task Force		
														2 HMMWV (2 in 1 icon)		* 773	6	FSB	BSA Task Force			
														1 Truck		* 859	3	FSB	BSA Task Force			
														Tac Sec	1 M113	* 832	4	FSB	BSA Task Force			
														Commo Sec	2 HMMWV(2 in 1 icon)	* 775	8	FSB	BSA Task Force			
														Asst Bde Eng Sec	1 HMMWV	* 804	3	FSB	BSA Task Force			
														Food Serv Sec	2 Trucks (2 in 1 icon)	* 858	12	FSB	BSA Task Force			
														Sprt Plt	Sprt Plt HQ		1 HMMWV	* 761	4	FSB	BSA Task Force	
																	Bn Maint Sec	1 M88A1	* 823	2	FSB	BSA Task Force
																		1 HMMWV	* 767	4	FSB	BSA Task Force
																		4 Trucks (4 in 1 icon)	* 852	40	FSB	BSA Task Force
																		1 5 ton wrecker	* 886	1	FSB	BSA Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
			Transp Sec		1 Truck	* 854	2	FSB	BSA Task Force
					5 Trucks (5 in 1 icon)	* 855	5	FSB	BSA Task Force
	Eng Co 1		Co HQ		1 M113	130	3	1 TFA	Tank Bn Task Force
					2Truck	153	3	1 TFA	Tank Bn Task Force
						* 154	3	FSB	BSA Task Force
		2 Eng Plt			1 HMMWV	* 42	2	FSB	BSA Task Force
			2 Plt HQ						
					2 M113	126	2	1 TFA	Tank Bn Task Force
						127	2	1 TFA	Tank Bn Task Force
					2 HMMWV	* 38	2	FSB	BSA Task Force
						* 40	2	FSB	BSA Task Force
				6 Eng Sqd	6 M113	122	8	1 TFA	Tank Bn Task Force
						123	8	1 TFA	Tank Bn Task Force
						124	8	1 TFA	Tank Bn Task Force
						125	8	1 TFA	Tank Bn Task Force
						128	8	1 TFA	Tank Bn Task Force
						129	8	1 TFA	Tank Bn Task Force
		Asl & Obs Plt							
			Plt HQ						
					2 HMMWV	39	2	1 TFA	Tank Bn Task Force
						41	2	1 TFA	Tank Bn Task Force
			Assault Sec 1						
					4 AVLB (2 in 1 icon)	145	4	1 TFA	Tank Bn Task Force
						146	4	1 TFA	Tank Bn Task Force
			Assault Sec 2						
					2 CEV (2 in 1 icon)	144	8	1 TFA	Tank Bn Task Force
			ObsTacle Sec						
					2 6 ton M548 (2 in 1 icon)	218	4	1 TFA	Tank Bn Task Force
					4 Semi-trailer flatbet (4 in 1 icon) *	220	4	FSB	BSA Task Force
					7 ACE (7 in 1 icon) *	147	7	FSB	BSA Task Force
					2 Volcano (2 in 1 icon)	192	4	1 TFA	Tank Bn Task Force
	Eng Co 2		Co HQ						
					1 M113	359	3	2 TFA	Mech Inf Bn 1 Task Force
					2 Truck	427	3	2 TFA	Mech Inf Bn 1 Task Force
						* 426	3	FSB	BSA Task Force
					1 HMMWV	* 284	2	FSB	BSA Task Force
		2 Eng Plt							
			2 Plt HQ						
					2 M113	360	2	2 TFA	Mech Inf Bn 1 Task Force
						366	2	2 TFA	Mech Inf Bn 1 Task Force
					2 HMMWV	* 282	2	FSB	BSA Task Force
						* 285	2	FSB	BSA Task Force
				6 Eng Sqd	6 M113	361	8	2 TFA	Mech Inf Bn 1 Task Force
						362	8	2 TFA	Mech Inf Bn 1 Task Force
						363	8	2 TFA	Mech Inf Bn 1 Task Force
						364	8	2 TFA	Mech Inf Bn 1 Task Force
						365	8	2 TFA	Mech Inf Bn 1 Task Force
						382	8	2 TFA	Mech Inf Bn 1 Task Force
		Asl & Obs Plt							
			Plt HQ						
					2 HMMWV	281	2	2 TFA	Mech Inf Bn 1 Task Force
						283	2	2 TFA	Mech Inf Bn 1 Task Force

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Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fid Arty Bn	HHB	Eng Co 3 (3 co per eng bn)	Assault Sec 1		4 AVLB (2 in 1 icon)	* 402	4	2 TFA	Mech Inf Bn 1 Task Force
						* 401	4	2 TFA	Mech Inf Bn 1 Task Force
			Assault Sec 2		2 CEV (2 in 1 icon)	* 400	8	2 TFA	Mech Inf Bn 1 Task Force
			ObsTacle Sec		2 6 ton M548 (2 in 1 icon)	* 476	4	2 TFA	Mech Inf Bn 1 Task Force
					4 Semi-trailer flatbet (4 in 1 icon)	* 479	4	FSB	BSA Task Force
					7 ACE (7 in 1 icon)	* 403	7	FSB	BSA Task Force
					2 Volcano (2 in 1 icon)	* 451	4	2 TFA	Mech Inf Bn 1 Task Force
			Co HQ		1 M113	629	3	3 TFA	Mech Inf Bn 2 Task Force
					2 Trucks	674	3	3 TFA	Mech Inf Bn 2 Task Force
						* 675	3	FSB	BSA Task Force
					1 HMMWV	* 526	2	FSB	BSA Task Force
			2 Eng Plt						
			2 Plt HQ 1		2 M113	627	2	3 TFA	Mech Inf Bn 2 Task Force
						628	2	3 TFA	Mech Inf Bn 2 Task Force
					2 HMMWV	* 524	2	FSB	BSA Task Force
						* 525	2	FSB	BSA Task Force
				6 Eng Sqd	6 M113	621	8	3 TFA	Mech Inf Bn 2 Task Force
						622	8	3 TFA	Mech Inf Bn 2 Task Force
						623	8	3 TFA	Mech Inf Bn 2 Task Force
						624	8	3 TFA	Mech Inf Bn 2 Task Force
						625	8	3 TFA	Mech Inf Bn 2 Task Force
						626	8	3 TFA	Mech Inf Bn 2 Task Force
			Asl & Obs Plt						
			Plt HQ			522	2	3 TFA	Mech Inf Bn 2 Task Force
						523	2	3 TFA	Mech Inf Bn 2 Task Force
			Assault Sec 1		2 HMMWV	656	4	3 TFA	Mech Inf Bn 2 Task Force
						657	4	3 TFA	Mech Inf Bn 2 Task Force
			Assault Sec 2						
			Obstacle Sec		4 AVLB (2 in 1 icon)	655	8	3 TFA	Mech Inf Bn 2 Task Force
					2 6 ton M548 (2 in 1 icon)	729	4	3 TFA	Mech Inf Bn 2 Task Force
					4 Semi-trailer flatbet (4 in 1 icon)	* 734	4	FSB	BSA Task Force
					7 ACE (7 in 1 icon)	* 658	7	FSB	BSA Task Force
					2 Volcano (2 in 1 icon)	706	4	3 TFA	Mech Inf Bn 2 Task Force
			Commd Sec		2 HMMWV	* 792	5	FSB	BSA Task Force
						* 789	6	FSB	BSA Task Force
			Batt HQ		2 Truck	* 862	2	FSB	BSA Task Force
						* 865	2	FSB	BSA Task Force
					1 HMMWV	* 780	3	FSB	BSA Task Force
			Ops Sec		1 M577	* 933	4	FSB	BSA Task Force
					1 HMMWV	* 927	4	FSB	BSA Task Force
			Fire Dir Sec		1 M577	* 816	5	FSB	BSA Task Force
					1 Truck	* 870	4	FSB	BSA Task Force
			Intel Sec						
					1 M577	* 815	4	FSB	BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
		Survey Plt	Plt HQ		1 HMMWV	* 805	3	FSB	BSA Task Force
			Survey Sec		4 HMMWV	* 791	3	FSB	BSA Task Force
						* 788	3	FSB	BSA Task Force
						* 787	2	FSB	BSA Task Force
						* 790	2	FSB	BSA Task Force
		Commo Plt	Plt HQ		2 HMMWV	* 783	6	FSB	BSA Task Force
						* 795	5	FSB	BSA Task Force
			Wire Sec		4 HMMWV	* 785	5	FSB	BSA Task Force
						* 782	5	FSB	BSA Task Force
						* 784	4	FSB	BSA Task Force
						* 786	4	FSB	BSA Task Force
			Radio Sec		3HMMWV	* 794	3	FSB	BSA Task Force
						* 793	3	FSB	BSA Task Force
						* 799	4	FSB	BSA Task Force
						* 861	2+4	FSB	BSA Task Force
						* 889	2	FSB	BSA Task Force
						* 873	4	FSB	BSA Task Force
						* 798	4	FSB	BSA Task Force
						* 778	1	FSB	BSA Task Force
						207	4	line	Tank Bn Task Force
						208	4	line	Tank Bn Task Force
						209	4	line	Tank Bn Task Force
						210	4	line	Tank Bn Task Force
						466	4	line	Mech Inf Bn 1 Task Force
						467	4	line	Mech Inf Bn 1 Task Force
						468	4	line	Mech Inf Bn 1 Task Force
						469	4	line	Mech Inf Bn 1 Task Force
						721	4	line	Mech Inf Bn 2 Task Force
						722	4	line	Mech Inf Bn 2 Task Force
						723	4	line	Mech Inf Bn 2 Task Force
						724	4	line	Mech Inf Bn 2 Task Force
			Combat Medic Sec	Fld Trns	3 HEMMT C (3 in 1 icon)	* 887	3	FSB	BSA Task Force
					1 HMMWV-AMB	* 890	2	Bde HHC	BSA Task Force
Fld Arty Bn	Svc Batt		Batt HQ		1 HMMWV	* 768	7	FSB	BSA Task Force
			BnSupply Sec		9 Trucks (9 in 1 icon)	* 856	9	FSB	BSA Task Force
			Maint Plt HQ		1 HMMWV	* 774	6	FSB	BSA Task Force
					1 Truck	* 872	1	FSB	BSA Task Force
			Bn Maintenance Sec		3 M578 (3 in 1 icon)	* 883	6	FSB	BSA Task Force
					3 Trucks (3 in 1 icon)	* 864	24	FSB	BSA Task Force
					1 5 ton wrecker	* 885	1	FSB	BSA Task Force
					1 Truck	* 868	10	FSB	BSA Task Force
					3 Trucks (3 in 1 icon)	* 846	33	FSB	BSA Task Force
			SVC Batt Maint Sec		1 Truck	* 847	7	FSB	BSA Task Force
			Ammo Plt HQ		1 HMMWV	* 776	4	FSB	BSA Task Force
			2 Ammo Secs		14 Trucks (14 in 1 icon)	* 849	28	FSB	BSA Task Force
					7 Trucks (7 in 1 icon)	* 850	14	FSB	BSA Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fld Arty Bn	Fld Arty Batt 1		Food Svc Sec		1 Truck	* 851	5	FSB	BSA Task Force
					4 Trucks (4 in 1 icon)	* 852	16	FSB	BSA Task Force
			Batt HQ		1 Truck	186	3	1 TFA	Tank Bn Task force
					2 HMMWV	31	2	1 TFA	Tank Bn Task force
						33	2	1 TFA	Tank Bn Task force
		Firing Plt 1	Commo Sec		1 HMMWV	32	2	1 TFA	Tank Bn Task Force
			Plt HQ			34	2	1 TFA	Tank Bn Task Force
						35	2	1 TFA	Tank Bn Task Force
						36	2	1 TFA	Tank Bn Task Force
						37	2	1 TFA	Tank Bn Task Force
		Firing Plt 2	Fire Direction Center 1		1 M577	107	8	1 TFA	Tank Bn Task Force
					1 M577	108	8	1 TFA	Tank Bn Task Force
			8 Howitzer Sec			211	4	1 TFA	Tank Bn Task Force
						212	4	1 TFA	Tank Bn Task Force
						213	4	1 TFA	Tank Bn Task Force
						214	4	1 TFA	Tank Bn Task Force
						215	4	1 TFA	Tank Bn Task Force
						216	4	1 TFA	Tank Bn Task Force
						217	4	1 TFA	Tank Bn Task Force
						219	4	1 TFA	Tank Bn Task Force
					8 M109	193	5	1 TFA	Tank Bn Task Force
						194	5	1 TFA	Tank Bn Task Force
						195	5	1 TFA	Tank Bn Task Force
						196	5	1 TFA	Tank Bn Task Force
						197	5	1 TFA	Tank Bn Task Force
						198	5	1 TFA	Tank Bn Task Force
						199	5	1 TFA	Tank Bn Task Force
						200	5	1 TFA	Tank Bn Task Force
	Fld Arty Batt 2	Ammo Sec			6 Trucks	148	2	1 TFA	Tank Bn Task Force
						149	2	1 TFA	Tank Bn Task Force
						150	2	1 TFA	Tank Bn Task Force
						151	2	1 TFA	Tank Bn Task Force
						152	2	1 TFA	Tank Bn Task Force
		Batt HQ			1 Truck	409	3	2 TFA	Mech Inf Bn 1 Task Force
					2 HMMWV	256	2	2 TFA	Mech Inf Bn 1 Task Force
						257	2	2 TFA	Mech Inf Bn 1 Task Force
		Firing Plt 1	Commo Sec		1 HMMWV	255	2	2 TFA	Mech Inf Bn 1 Task Force
			Plt HQ			252	2	2 TFA	Mech Inf Bn 1 Task Force
						253	2	2 TFA	Mech Inf Bn 1 Task Force
						254	2	2 TFA	Mech Inf Bn 1 Task Force
						258	2	2 TFA	Mech Inf Bn 1 Task Force
		Firing Plt 2	Fire Direction Center 1		1 M577	348	8	2 TFA	Mech Inf Bn 1 Task Force
					1 M577	349	8	2 TFA	Mech Inf Bn 1 Task Force
			Howitzer Sec			470	4	2 TFA	Mech Inf Bn 1 Task Force
						471	4	2 TFA	Mech Inf Bn 1 Task Force
						472	4	2 TFA	Mech Inf Bn 1 Task Force
						473	4	2 TFA	Mech Inf Bn 1 Task Force

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Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fld Arty Bn	Fld Arty Batt 3 (3 batty per arty bn)				8 M109	474	4	2 TFA	Mech Inf Bn 1 Task Force
						475	4	2 TFA	Mech Inf Bn 1 Task Force
						477	4	2 TFA	Mech Inf Bn 1 Task Force
						478	4	2 TFA	Mech Inf Bn 1 Task Force
						452	5	2 TFA	Mech Inf Bn 1 Task Force
						453	5	2 TFA	Mech Inf Bn 1 Task Force
						454	5	2 TFA	Mech Inf Bn 1 Task Force
						455	5	2 TFA	Mech Inf Bn 1 Task Force
						456	5	2 TFA	Mech Inf Bn 1 Task Force
						457	5	2 TFA	Mech Inf Bn 1 Task Force
						458	5	2 TFA	Mech Inf Bn 1 Task Force
						459	5	2 TFA	Mech Inf Bn 1 Task Force
			Ammo Sec		6 Trucks	408	2	2 TFA	Mech Inf Bn 1 Task Force
						410	2	2 TFA	Mech Inf Bn 1 Task Force
						411	2	2 TFA	Mech Inf Bn 1 Task Force
						412	2	2 TFA	Mech Inf Bn 1 Task Force
						413	2	2 TFA	Mech Inf Bn 1 Task Force
						414	2	2 TFA	Mech Inf Bn 1 Task Force
			Batt HQ		1 Truck	661	3	3 TFA	Mech Inf Bn 2 Task Force
					2 HMMWV	534	2	3 TFA	Mech Inf Bn 2 Task Force
						535	2	3 TFA	Mech Inf Bn 2 Task Force
			Commo Sec		1 HMMWV	533	2	3 TFA	Mech Inf Bn 2 Task Force
		Firing Plt 1	Plt HQ		4 HMMWV	529	2	3 TFA	Mech Inf Bn 2 Task Force
						530	2	3 TFA	Mech Inf Bn 2 Task Force
						531	2	3 TFA	Mech Inf Bn 2 Task Force
						532	2	3 TFA	Mech Inf Bn 2 Task Force
		Firing Plt 2	Fire Direction Center 1		1 M577	606	8	3 TFA	Mech Inf Bn 2 Task Force
			Fire Direction Center 2		1 M577	607	8	3 TFA	Mech Inf Bn 2 Task Force
			Howitzer Sec		8 M548	725	4	3 TFA	Mech Inf Bn 2 Task Force
						726	4	3 TFA	Mech Inf Bn 2 Task Force
						727	4	3 TFA	Mech Inf Bn 2 Task Force
						728	4	3 TFA	Mech Inf Bn 2 Task Force
						730	4	3 TFA	Mech Inf Bn 2 Task Force
						731	4	3 TFA	Mech Inf Bn 2 Task Force
						732	4	3 TFA	Mech Inf Bn 2 Task Force
						733	4	3 TFA	Mech Inf Bn 2 Task Force
						707	5	3 TFA	Mech Inf Bn 2 Task Force
						708	5	3 TFA	Mech Inf Bn 2 Task Force
						709	5	3 TFA	Mech Inf Bn 2 Task Force
						710	5	3 TFA	Mech Inf Bn 2 Task Force
						711	5	3 TFA	Mech Inf Bn 2 Task Force
						712	5	3 TFA	Mech Inf Bn 2 Task Force
						713	5	3 TFA	Mech Inf Bn 2 Task Force
						714	5	3 TFA	Mech Inf Bn 2 Task Force
	Fld Arty Batt 3				8 M109	707	5	3 TFA	Mech Inf Bn 2 Task Force
						708	5	3 TFA	Mech Inf Bn 2 Task Force
						709	5	3 TFA	Mech Inf Bn 2 Task Force
						710	5	3 TFA	Mech Inf Bn 2 Task Force
						711	5	3 TFA	Mech Inf Bn 2 Task Force
						712	5	3 TFA	Mech Inf Bn 2 Task Force
						713	5	3 TFA	Mech Inf Bn 2 Task Force
						714	5	3 TFA	Mech Inf Bn 2 Task Force
						668	2	3 TFA	Mech inf Bn 2 Task Force
						669	2	3 TFA	Mech inf Bn 2 Task Force
						670	2	3 TFA	Mech inf Bn 2 Task Force
						671	2	3 TFA	Mech inf Bn 2 Task Force
						672	2	3 TFA	Mech inf Bn 2 Task Force
						673	2	3 TFA	Mech inf Bn 2 Task Force
			Ammo Sec		6 Trucks	668	2	3 TFA	Mech inf Bn 2 Task Force
						669	2	3 TFA	Mech inf Bn 2 Task Force
						670	2	3 TFA	Mech inf Bn 2 Task Force
						671	2	3 TFA	Mech inf Bn 2 Task Force
						672	2	3 TFA	Mech inf Bn 2 Task Force
						673	2	3 TFA	Mech inf Bn 2 Task Force
						673	2	3 TFA	Mech inf Bn 2 Task Force

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver, Movement to Contact."

Table A1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
					1 FM Retrans Team (from Signal Sppt Co, Div Signal Bn)	* 781	2	Bde HHC	BSA Task Force
		MP Plt (from MP Co)	HQ		2 HMMWV	* 801	3	FSB	BSA Task Force
						* 800	18	FSB	BSA Task Force
		Smoke Plt (from Chemical Co)	Plt HQ		1 M113	833	3	Fwd	Tank Bn Task Force
				2 Smoke Sqds (6 tms)	6 SMKGEN (6 in 1 icon)	810	18	Fwd	Tank Bn Task Force
				1 Sppt Sqd	2 Trucks (2 in 1 icon)	* 871	4	FSB	BSA Task Force
		GSR Plt 1 (from Intel&Survey Co, MI Bn)	Plt HQ		1 HMMWV	* 926	2	FSB	BSA Task Force
				2 GSR Squads	4 AN/PPS-5	142	3	Fwd	Tank Bn Task Force
						143	3	Fwd	Tank Bn Task Force
						398	3	Fwd	Mech Inf Bn 1 Task Force
						399	3	Fwd	Mech Inf Bn 1 Task Force
		GSR Plt 2 (from Intel&Survey Co, MI Bn)	Plt HQ		1 HMMWV	* 928	2	FSB	BSA Task Force
				2 GSR Squads	4 AN/PPS-5	653	3	Fwd	Mech Inf Bn 2 Task Force
						654	3	Fwd	Mech Inf Bn 2 Task Force
						844	3	Fwd	Mech Inf Bn 1 Task Force
						845	3	Fwd	Mech Inf Bn 1 Task Force
				1/2 Voice Collection Team	1 HMMWV with AN/TRQ-30	877	3	Fwd	Mech Inf Bn 1 Task Force

Notes: FLD TRN: In brigade with FSB
 CBT TRN: In battalion near rear
 MAINT: In battalion near rear
 In BSA: BDE HHC, FSB, FLD TRN

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
1	20.602	41.411	Tank Bn Task Force	4	fwd	M1	HB FM MtC	Tank Bn	HHC		Bn HQ	Tac CP Element		
2	20.689	41.412	Tank Bn Task Force	4	fwd	M1	HB FM MtC	Tank Bn	HHC		Bn HQ	Tac CP Element		
3	16.948	43.896	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
4	16.337	43.907	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
5	21.072	42.916	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec			
6	21.655	42.899	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec			
7	16.702	44.008	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
8	16.797	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
9	16.893	44.012	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
10	17.002	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
11	17.200	44.005	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
12	17.295	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
13	17.396	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
14	17.497	44.008	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
15	19.707	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
18	19.800	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
19	19.898	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
20	20.001	43.513	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
21	21.406	43.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
22	21.498	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
23	21.592	43.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
24	21.703	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
25	21.902	43.004	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
26	22.011	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
26	22.095	43.014	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
27	22.192	43.004	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
27	24.196	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
28	24.294	44.007	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
29	24.400	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
30	24.502	44.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
31	22.322	33.149	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
32	22.242	33.076	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Commo Sec			
33	22.246	33.151	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
34	23.295	33.629	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
35	23.212	33.634	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
36	22.901	33.623	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
37	22.809	33.628	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
38	*	18.902	18.161	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 2		
39		21.004	44.154	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Plt HQ		
40	*	18.900	18.232	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 2		
41		21.000	44.242	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Plt HQ		
42	*	18.948	18.195	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1		Co HQ		
43		19.396	38.936	Tank Bn Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
44		19.393	39.069	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
45		23.798	41.071	Tank Bn Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		
46		23.793	40.941	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
47	21.565	38.650	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
48	21.624	38.649	Tank Bn Task Force	2	Cbt	HMMWV	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
49	16.757	40.584	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec			
50	16.824	40.583	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec			
51	20.757	36.127	Tank Bn Task Force	3	1 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Missile Plt	Missile Sec			
52	20.716	36.129	Tank Bn Task Force	2	1 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ			
53	20.797	36.127	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC	Bn Commo Plt		Main CP Element		
54	21.600	34.599	Tank Bn Task Force	6	Cbt train	HMMWV	HB FM MtC	Tank Bn	HHC		S-1 Sec	Main CP Element		
55	20.853	36.205	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC		S-3 Sec	Main CP Element		
56	21.041	36.156	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC		S-3 Sec	TACP Sec		
57	20.854	36.124	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC	Bn Commo Plt		Main CP Element		
58	21.501	34.603	Tank Bn Task Force	2	Cbt train	HMMWV	HB FM MtC	Tank Bn	HHC		S-4 Sec	Cbt trains CP Element		
59	*	16.002	BSA Task Force	2	Fld train	HMMWV	HB BSA MtC	Tank Bn	HHC		Co HQ	Fld trains CP Element		
60	21.005	36.108	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC		Co HQ	Main CP Element		
61	21.040	36.239	Tank Bn Task Force	3	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC		Bn HQ	Main CP Element		
62	20.796	36.203	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM MtC	Tank Bn	HHC		S-3 Sec	Main CP Element		
63	19.325	37.446	Tank Bn Task Force	2	Bn rear	HMMWV	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt	Mort Plt HQ			
64	19.289	37.448	Tank Bn Task Force	1	Bn rear	HMMWV	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt	Mort Plt HQ			
65	21.595	34.515	Tank Bn Task Force	2	Cbt train	HMMWV	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Plt HQ			
66	*	15.905	BSA Task Force	3+2	Fld train	HMMWV	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	HQ Sec			
67	20.501	33.135	Tank Bn Task Force	1	Maint	HMMWV	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Plt HQ			
68	20.561	33.131	Tank Bn Task Force	1	Maint	HMMWV	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Plt HQ			
69	20.605	33.207	Tank Bn Task Force	2	Maint	HMMWV	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
70	21.303	34.601	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM MtC	Tank Bn	HHC	Bn Commo Plt	HQ Sec	Cbt trains CP Element		
71	21.352	34.604	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM MtC	Tank Bn	HHC	Bn Commo Plt	HQ Sec	Cbt trains CP Element		
72	21.405	34.605	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM MtC	Tank Bn	HHC	Bn Commo Plt		Cbt trains CP Element		
73	23.847	43.919	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
74	23.396	43.910	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
75	18.872	43.414	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
76	19.264	43.415	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
77	16.193	44.011	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
78	16.296	44.012	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
79	16.393	44.011	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
80	16.502	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
81	18.700	43.505	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
82	18.797	43.506	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
83	18.894	43.507	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
84	18.998	43.511	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
85	19.198	43.507	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
86	19.297	43.509	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
87	19.396	43.511	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
88	19.498	43.510	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
89	20.902	43.008	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
90	21.104	43.007	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
91	21.004	43.009	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
92	21.192	43.013	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
93	23.197	44.004	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
94	23.288	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
95	23.392	44.005	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
96	23.487	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
97	23.685	44.007	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
98	23.786	44.004	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
99	23.895	44.003	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
100	23.993	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
101	18.198	49.206	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
102	18.391	49.197	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
103	18.303	49.117	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	HQ Sec			
104	22.598	49.401	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
105	22.801	49.401	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
106	22.712	49.315	Tank Bn Task Force	5	fwd	M3	HB FM MtC	Tank Bn	HHC	Bn Scout Plt	HQ Sec			
107	22.855	33.640	Tank Bn Task Force	8	1 TFA	M577	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 2	Fire Direction Center 1			
108	23.255	33.647	Tank Bn Task Force	8	1 TFA	M577	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 2	Fire Direction Center 2			
109	19.496	37.517	Tank Bn Task Force	3	Bn rear	M577	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt	Mort Sec HQ			
110	19.105	37.519	Tank Bn Task Force	3	Bn rear	M577	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt	Mort Sec HQ			
111	21.450	34.610	Tank Bn Task Force	4	Cbt train	M577	HB FM MtC	Tank Bn	HHC	Bn Commo Plt		Cbt trains CP Element		
112	21.554	34.614	Tank Bn Task Force	2	Cbt train	M577	HB FM MtC	Tank Bn	HHC		S-4 Sec	Cbt trains CP Element		
113	20.942	36.210	Tank Bn Task Force	6	Bn HHC	M577	HB FM MtC	Tank Bn	HHC		S-3 Sec	Main CP Element		
114	20.990	36.209	Tank Bn Task Force	4	Bn HHC	M577	HB FM MtC	Tank Bn	HHC		S-1 Sec	Main CP Element		
115	20.711	33.203	Tank Bn Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Tank Bn	HHC			Cbt trains Element		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
116	20.063	33.201	Tank Bn Task Force	3	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Co trains Element		
117	20.256	33.206	Tank Bn Task Force	3	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Co trains Element		
118	20.349	33.200	Tank Bn Task Force	3	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Co trains Element		
119	20.658	33.204	Tank Bn Task Force	2	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Cbt trains Element		
120	20.161	33.203	Tank Bn Task Force	3	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Co trains Element		
121	20.757	33.205	Tank Bn Task Force	2	Maint	Vehicle-Medium/M88	HB FM MtC	Tank Bn	HHC			Cbt trains Element		
122	21.105	44.253	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 1
123	21.204	44.156	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 2
124	21.203	44.253	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 3
125	21.299	44.254	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 4
126	21.403	44.154	Tank Bn Task Force	2	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 1			
127	21.403	44.258	Tank Bn Task Force	2	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 1			
128	21.105	44.158	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 5
129	21.297	44.160	Tank Bn Task Force	8	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1	Eng Plt 2				Eng Sqd 6
130	21.592	44.211	Tank Bn Task Force	3	1 TFA	M113	HB FM MtC	Eng Bn	Eng Co 1		Co HQ			
131	23.801	41.011	Tank Bn Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
132	19.397	39.006	Tank Bn Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
133	20.115	33.201	Tank Bn Task Force	4	Maint	M113	HB FM MtC	Tank Bn	HHC			Co trains Element		
134	20.300	33.198	Tank Bn Task Force	4	Maint	M113	HB FM MtC	Tank Bn	HHC			Co trains Element		
135	20.012	33.206	Tank Bn Task Force	4	Maint	M113	HB FM MtC	Tank Bn	HHC			Co trains Element		
136	20.211	33.205	Tank Bn Task Force	4	Maint	M113	HB FM MtC	Tank Bn	HHC			Co trains Element		
137	20.646	41.340	Tank Bn Task Force	1+1+2	fwd	M113	HB FM MtC	Tank Bn	HHC		S-2 Sec	Tac CP Element		
138	20.720	36.218	Tank Bn Task Force	2	1 TF HHC Area	M113	HB FM MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
139	18.080	34.232	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
140	23.281	43.099	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
141	16.594	42.719	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
142	20.405	49.005	Tank Bn Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 1				GSR SQUAD 1
143	20.307	49.008	Tank Bn Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 1				GSR SQUAD 1
144	20.905	44.199	Tank Bn Task Force	8	1 TFA	2 CEV (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 2			
145	23.661	43.780	Tank Bn Task Force	4	1 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 1			
146	19.146	43.260	Tank Bn Task Force	4	1 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 1			
147	* 18.748	18.163	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec			
148	22.245	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
149	22.297	32.988	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
150	22.346	32.988	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
151	22.396	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
152	22.442	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
153	21.488	44.195	Tank Bn Task Force	3	1 TFA	Truck	HB FM MtC	Eng Bn	Eng Co 1		Co HQ			
154	* 18.999	18.190	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 1		Co HQ			
155	19.358	38.996	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
156	23.760	41.008	Tank Bn Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
157	19.427	38.997	Tank Bn Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
158	23.832	41.003	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
159	21.592	38.674	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
160	16.786	40.595	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec			
161	* 15.952	19.206	BSA Task Force	3	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		Co HQ	Fld trains CP Element		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
162	20.899	36.202	Tank Bn Task Force	4	Bn HHC	Truck	HB FM MtC	Tank Bn	HHC		S-3 Sec	Main CP Element		
163	*	15.998	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			POL Team	
164		21.529	Tank Bn Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station			
165		20.395	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
166	*	15.652	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Maint Plt	Rec/Sprt Sec			
167	*	15.998	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec			
168		20.555	Tank Bn Task Force	2	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
169	*	15.798	BSA Task Force	6	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		Maint/SVC Sec			
170	*	15.906	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec			
171	*	15.958	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec			
172		20.494	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
173	*	15.850	BSA Task Force	6	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		S-1 Sec	Main CP Element		
174		20.901	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
175		20.950	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
176		20.850	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
177		20.993	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
178		20.801	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
179		20.448	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
180		20.316	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
181		20.923	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
182		20.725	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
183		20.524	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
184	*	15.542	BSA Task Force	12	Fld train	3 Trucks (3 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			Co Mess Team	

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
185	22.192	32.987	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
186	22.297	33.067	Tank Bn Task Force	3	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
187	23.897	43.795	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
188	20.537	36.176	Tank Bn Task Force	2	1 TF HHC Area	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
189	17.005	43.776	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
190	19.492	43.312	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
191	21.725	42.796	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
192	18.831	43.039	Tank Bn Task Force	4	1 TFA	2 Volcano (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec			
193	22.896	33.812	Tank Bn Task Force	5	1 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
194	23.003	33.811	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
195	23.096	33.814	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
196	23.195	33.816	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
197	23.292	33.813	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
198	23.388	33.814	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
199	22.794	33.817	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
200	22.695	33.817	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
201	19.589	37.606	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
202	19.105	37.614	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
203	19.012	37.620	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
204	19.197	37.612	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
205	19.402	37.608	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
206	19.497	37.610	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
207	19.424	43.363	Tank Bn Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Tank Co FIST Tm 1	

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
208	16.684	43.843	Tank Bn Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Tank Co FIST Tm 2	
209	23.954	43.873	Tank Bn Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Tank Co FIST Tm 3	
210	21.403	42.836	Tank Bn Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Tank Co FIST Tm 4	
211	22.792	33.713	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
212	22.897	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M549	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
213	23.005	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M550	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
214	23.095	33.714	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M551	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
215	23.197	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M552	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
216	23.293	33.710	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M553	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
217	23.389	33.706	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M554	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
218	20.797	44.206	Tank Bn Task Force	4	1 TFA	Carrier/M548 (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec			
219	22.694	33.715	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M555	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
220	* 18.777	18.253	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec			
221	* 15.753	19.216	BSA Task Force	1	Fld train	5 Ton Wrecker	HB BSA MtC	Tank Bn	HHC	Bn Maint Plt	Rec/Sprt Sec			
222	* 15.850	19.402	BSA Task Force	2	Fld train	Cargo HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			Ammo Team	
223	* 15.593	19.401	BSA Task Force	9	Fld train	HEMMT (9 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			Ammo Team	
224	* 15.624	19.316	BSA Task Force	10	Fld train	HEMMT (10 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			POL Team	
225	* 15.955	19.320	BSA Task Force	2	Fld train	Fuel HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			POL Team	
226	* 15.905	19.313	BSA Task Force	2	Fld train	Fuel HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			POL Team	
227	* 15.702	19.213	BSA Task Force	1	Fld train	RCovery Veh HEMMT	HB BSA MtC	Tank Bn	HHC		Rec/Sprt Sec			
228	21.453	34.526	Tank Bn Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station			
229	21.398	34.535	Tank Bn Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station			
230	21.597	34.446	Tank Bn Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Evac Sec			

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
231	21.397	34.444	Tank Bn Task Force	14	Cbt train	Ambulences (7 in 1 icon)	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Evac Sec			
232	9.308	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
233	9.400	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
233	10.931	42.283	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
234	11.735	42.299	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
236	11.112	42.407	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
237	11.205	42.410	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
238	11.306	42.414	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
239	11.407	42.414	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
240	11.608	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
241	11.706	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
242	11.800	42.418	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
243	11.901	42.415	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
244	9.110	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
245	9.206	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt				
246	11.427	39.175	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
247	11.364	39.172	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
248	8.597	38.668	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
249	8.598	38.540	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
250	5.993	39.944	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
251	5.993	40.064	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
252	6.591	33.802	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ			
253	6.913	33.802	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
254	6.504	33.806	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ			
255	7.541	33.289	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Commo Sec			
256	7.471	33.364	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Batt HQ			
257	7.529	33.366	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Batt HQ			
258	6.996	33.801	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ			
259	11.129	37.141	Mech Inf Bn 1 Task Force	2	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
260	11.084	37.145	Mech Inf Bn 1 Task Force	1	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
261	10.655	35.927	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element		
262	10.653	36.022	Mech Inf Bn 1 Task Force	1	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element		
263	10.545	35.998	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
264	10.490	36.000	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
265	10.395	36.007	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		TACP Sec	Main CP Element		
266	10.397	35.901	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
267	10.492	35.203	Mech Inf Bn 1 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-4 Sec	Cbt trains CP Element		
268	10.349	36.007	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		Co HQ	Main CP Element		
269	10.597	35.202	Mech Inf Bn 1 Task Force	5	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-1 Sec			
270	10.443	36.003	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
271	10.444	35.901	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
272	10.395	35.211	Mech Inf Bn 1 Task Force	1	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element		
273	10.598	35.125	Mech Inf Bn 1 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Plt HQ			
274	* 10.508	19.425	BSA Task Force	1	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
275	9.369	34.694	Mech Inf Bn 1 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			
276	* 10.994	19.406	BSA Task Force	2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
277	9.315	34.692	Mech Inf Bn 1 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			
278	9.705	34.758	Mech Inf Bn 1 Task Force	2	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
279	10.350	35.915	Mech Inf Bn 1 Task Force	3	2 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Missile Plt	Missile Sec			
280	10.307	35.919	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ			
281	10.401	43.541	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Plt HQ			
282	* 17.696	17.960	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 2			
283	10.398	43.464	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Plt HQ			
284	* 17.741	17.997	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ			
285	* 17.693	18.039	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 2			
286	13.048	43.621	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	AA Co		HQ			
287	13.005	43.623	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	AA Co		HQ			
288	* 10.784	19.424	BSA Task Force	3+2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	HQ Sec			
289	13.798	38.540	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
290	13.796	38.660	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
291	10.308	35.206	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element		
292	10.367	35.207	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element		
293	10.336	35.206	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element		
294	5.866	43.890	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
295	6.368	43.895	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
296	5.690	44.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1				
297	5.797	44.006	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1				
298	5.906	44.006	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3				
299	6.003	44.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1				

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
300	6.199	44.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1				
301	6.294	44.005	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2				
302	6.398	44.007	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3				
303	6.495	43.999	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2				
304	6.696	44.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2				
305	6.800	44.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2				
306	6.903	44.007	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3				
307	6.999	44.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3				
308	8.260	42.310	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
309	8.674	42.296	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
310	8.096	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
311	8.199	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
312	8.306	42.409	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
313	8.401	42.407	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
314	8.602	42.407	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
315	8.695	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
316	8.797	42.406	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
317	8.898	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
318	10.599	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
319	10.697	42.404	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
320	10.796	42.408	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
321	10.892	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
322	12.793	40.879	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
323	13.272	40.881	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
324	12.592	41.009	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
325	12.689	41.006	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
326	12.789	41.005	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
327	12.895	41.008	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
328	13.096	41.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
329	13.190	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
330	13.388	41.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
331	13.290	41.005	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
332	13.598	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
333	13.697	41.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
334	13.790	41.009	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
335	13.901	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt				
336	8.197	40.210	Mech Inf Bn 1 Task Force	5	fwd	M2	HB FM MtC	Mech Inf Bn 1	HHC		Bn HQ Sec	Tac CP Element		
337	8.112	40.213	Mech Inf Bn 1 Task Force	3	fwd	M2	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Tac CP Element		
338	13.353	49.135	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
339	6.398	48.696	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
340	6.301	48.697	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
341	6.350	48.624	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
342	13.398	49.203	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
343	13.292	49.199	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
344	10.598	36.002	Mech Inf Bn 1 Task Force	6	Bn HHC	M577	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
345	10.593	35.911	Mech Inf Bn 1 Task Force	4	Bn HHC	M577	HB FM MtC	Mech Inf Bn 1	HHC		S-2 Sec	Main CP Element		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
346	10.905	37.218	Mech Inf Bn 1 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
347	11.287	37.208	Mech Inf Bn 1 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
348	6.546	33.808	Mech Inf Bn 1 Task Force	8	2 TFA	M577	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 2	Fire Direction Center 1			
349	6.953	33.803	Mech Inf Bn 1 Task Force	8	2 TFA	M577	HB FM MtC	Fld arty Bn	Fld arty Batt 2	Firing Plt 2	Fire Direction Center 2			
350	10.439	35.215	Mech Inf Bn 1 Task Force	3	Cbt train	M577	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element		
351	10.542	35.211	Mech Inf Bn 1 Task Force	2	Cbt train	M577	HB FM MtC	Mech Inf Bn 1	HHC		S-4 Sec	Cbt trains CP Element		
352	9.847	34.756	Mech Inf Bn 1 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
353	9.795	34.854	Mech Inf Bn 1 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
354	9.400	34.859	Mech Inf Bn 1 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
355	9.202	34.854	Mech Inf Bn 1 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
356	9.597	34.855	Mech Inf Bn 1 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
357	9.958	34.753	Mech Inf Bn 1 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
358	9.902	34.755	Mech Inf Bn 1 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
359	11.002	43.509	Mech Inf Bn 1 Task Force	3	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2		Co HQ			
360	10.802	43.554	Mech Inf Bn 1 Task Force	2	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 1			
361	10.504	43.454	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 1
362	10.700	43.455	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 2
363	10.602	43.452	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 3
364	10.697	43.555	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 4
365	10.602	43.552	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 5
366	10.800	43.458	Mech Inf Bn 1 Task Force	2	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 1			
367	10.312	36.012	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	M113	HB FM MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ			
368	9.151	34.844	Mech Inf Bn 1 Task Force	6	Maint	M13	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			AA Co Maint Team	

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
369	9.245	34.850	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
370	9.849	34.846	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
371	9.454	34.847	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
372	9.657	34.844	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
373	9.654	34.760	Mech Inf Bn 1 Task Force	2	Maint	M113	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
374	8.159	40.133	Mech Inf Bn 1 Task Force	1+1+2	fwd	M113	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Tac CP Element		
375	5.995	40.009	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
376	8.601	38.608	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
377	13.799	38.606	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
378	12.946	44.119	Mech Inf Bn 1 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
379	13.418	44.125	Mech Inf Bn 1 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
380	8.551	48.736	Mech Inf Bn 1 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
381	13.080	44.070	Mech Inf Bn 1 Task Force	4	line	M113	HB FM MtC	Mech Inf Bn 1	AA Co		HQ			
382	10.502	43.550	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM MtC	Eng Bn	Eng Co 2	Eng Plt 2				Eng Sqd 6
383	12.997	44.208	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
384	13.103	44.210	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
385	13.289	44.213	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
386	13.391	44.213	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
387	13.494	44.207	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
388	13.593	44.209	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
389	8.402	48.806	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
390	8.502	48.805	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
391	8.597	48.809	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
392	8.687	48.815	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
393	12.796	44.209	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
394	12.895	44.207	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 1	AA Co	AA Plt				
395	12.071	41.392	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
396	7.343	34.892	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
397	6.245	42.315	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM MtC		Air Def arty Batt	Gun Plt				Gun Sqd
398	10.803	48.912	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 1				GSR SQUAD 2
399	10.805	48.820	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 1				GSR SQUAD 2
400	10.305	43.500	Mech Inf Bn 1 Task Force	8	2 TFA	2 CEV (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 2			
401	10.488	34.904	Mech Inf Bn 1 Task Force	4	2 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 1			
402	8.483	42.185	Mech Inf Bn 1 Task Force	4	2 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 1			
403	* 17.533	17.964	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec			
404	8.632	38.599	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
405	6.029	40.000	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
406	8.557	38.597	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 4		HQ			
407	5.956	39.995	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 3		HQ			
408	7.498	33.193	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			
409	7.495	33.301	Mech Inf Bn 1 Task Force	3	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Batt HQ			
410	7.348	33.199	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			
411	7.593	33.198	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			
412	7.544	33.193	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			
413	7.449	33.194	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			
414	7.397	33.194	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
415	*	10.934	19.408	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element	
416	*	10.830	19.411	BSA Task Force	4	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		S-1 Sec		
417	*	10.539	19.417	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
418		10.002	34.741	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
419		9.449	34.744	Mech Inf Bn 1 Task Force	6	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
420		9.594	34.747	Mech Inf Bn 1 Task Force	3	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
421		9.500	34.743	Mech Inf Bn 1 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
422		9.550	34.743	Mech Inf Bn 1 Task Force	4	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
423		9.746	34.743	Mech Inf Bn 1 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
424		9.999	34.841	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team1	
425		9.094	34.839	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		AA Co Maint Team	
426	*	17.792	17.981	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ		
427		10.899	43.495	Mech Inf Bn 1 Task Force	3	2 TFA	Truck	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ		
428	*	10.680	19.415	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
429		9.319	34.836	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
430		9.524	34.841	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
431		9.718	34.838	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
432		9.924	34.837	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
433	*	10.303	19.491	BSA Task Force	12	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Mess Sec		
434	*	10.899	19.599	BSA Task Force	4	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec		
435	*	10.142	19.505	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Mess Sec		
436	*	9.398	34.746	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
437	*	10.737	19.413	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
438	9.347	34.743	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
439	9.291	34.746	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
440	9.241	34.744	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
441	*	10.876	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element		
442	10.519	35.124	Mech Inf Bn 1 Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
443	13.757	38.595	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
444	13.837	38.595	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
445	11.396	39.192	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
446	8.756	42.197	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWVarmed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
447	11.477	42.193	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWVarmed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
448	13.375	40.781	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWVarmed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
449	10.139	35.972	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	HMMWVarmed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
450	6.473	43.754	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWVarmed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
451	10.924	42.076	Mech Inf Bn 1 Task Force	4	2 TFA	2 Volcano (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec			
452	6.691	34.005	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
453	6.594	33.998	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
454	6.492	34.000	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
455	6.396	34.000	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
456	7.099	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
457	6.895	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
458	6.998	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
459	6.795	34.002	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
460	10.998	37.310	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad

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Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
461	11.194	37.313	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad
462	10.901	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad
463	11.290	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad
464	10.798	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad
465	11.394	37.314	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 1	HHC	Hvy Mort Plt				Mortar Squad
466	6.639	43.834	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 1	
467	13.496	40.835	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 2	
468	8.855	42.261	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 3	
469	11.547	42.255	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 4	
470	6.894	33.898	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
471	6.689	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
472	6.593	33.896	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
473	6.490	33.893	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
474	6.395	33.892	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
475	7.098	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
476	10.198	43.507	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec			
477	7.000	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
478	6.794	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
479	* 17.571	18.054	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec			
480	* 10.628	19.424	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
481	* 10.584	19.424	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
482	* 10.901	19.512	BSA Task Force	8	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Team			
483	* 10.709	19.515	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Team			

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
484	*	10.498	19.606	BSA Task Force	5	Fld train	HEMMT (5 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec		
485	*	10.531	19.509	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Tean		
486	*	10.713	19.620	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec		
487		9.791	34.749	Mech Inf Bn 1 Task Force	1	Maint	Wrecker HEMMT	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
488		10.392	35.134	Mech Inf Bn 1 Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station		
489		10.439	35.132	Mech Inf Bn 1 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station		
490		10.400	35.010	Mech Inf Bn 1 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec		
491		10.597	35.018	Mech Inf Bn 1 Task Force	14	Cbt train	Ambulances (7 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec		
492		19.800	28.015	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
493		19.703	28.010	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
494		19.604	28.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
495		19.401	28.008	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
496		19.304	28.008	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
497		19.200	28.005	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
498		19.110	28.004	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
499		10.008	26.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
500		9.802	26.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
501		9.695	26.007	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
502		9.900	26.010	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
503		19.730	27.915	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec		
504		18.916	27.909	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec		
505		19.895	28.013	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
506		19.740	24.595	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element	

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
507	18.109	24.003	Mech Inf Bn 2 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-4 Sec	Cbt trains CP Element		
508	*	12.495	BSA Task Force	3+2	Fld train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Sppt Plt	HQ Sec			
509		19.643	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Main CP Element		
510		19.854	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Main CP Element		
511		19.855	Mech Inf Bn 2 Task Force	1	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Main CP Element		
512		19.692	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element		
513		19.598	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Main CP Element		
514		18.007	Mech Inf Bn 2 Task Force	1	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element		
515		19.549	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Co HQ	Main CP Element		
516		19.598	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		TACP Sec	Main CP Element		
517		16.593	Mech Inf Bn 2 Task Force	2	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
518	*	12.795	BSA Task Force	1	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
519		16.235	Mech Inf Bn 2 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Plt HQ			
520		16.298	Mech Inf Bn 2 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Plt HQ			
521	*	12.999	BSA Task Force	2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element		
522		18.603	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Plt HQ			
523		18.604	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Plt HQ			
524	*	18.297	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 2			
525	*	18.296	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 2			
526	*	18.347	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3		Co HQ			
527		22.263	Mech Inf Bn 2 Task Force	2	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Plt HQ			
528		22.309	Mech Inf Bn 2 Task Force	1	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Plt HQ			
529		12.419	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
530	12.505	23.827	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ			
531	12.816	23.833	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ			
532	12.902	23.829	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ			
533	11.899	23.292	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Commo Sec			
534	11.910	23.358	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Batt HQ			
535	11.983	23.357	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Batt HQ			
536	21.399	26.009	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
537	21.395	25.895	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
538	19.362	25.995	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec			
539	19.426	25.990	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec			
540	16.793	26.005	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
541	16.793	25.881	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
542	9.000	24.005	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ			
543	8.999	24.119	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ			
544	14.356	28.099	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	AA Co		HQ			
545	14.394	28.098	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	AA Co		HQ			
546	19.549	24.524	Mech Inf Bn 2 Task Force	3	3 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Missile Plt	Missile Sec			
547	18.194	23.907	Mech Inf Bn 2 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Plt HQ			
548	18.195	24.003	Mech Inf Bn 2 Task Force	5	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-1 Sec			
549	19.642	24.595	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element		
550	17.921	24.011	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element		
551	17.953	24.010	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element		
552	17.984	24.006	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
553	21.448	28.530	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
554	22.592	28.608	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
555	22.490	28.608	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
556	22.395	28.610	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
557	22.291	28.610	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
559	21.996	28.605	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
560	21.900	28.606	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
561	21.782	28.607	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
562	21.586	28.605	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
563	21.490	28.608	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
564	21.392	28.609	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
565	21.297	28.609	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
566	18.896	28.003	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
567	18.792	28.006	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
568	18.698	28.005	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
569	18.591	28.007	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
570	16.849	27.921	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
571	16.373	27.920	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
572	17.502	28.010	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
573	17.394	28.011	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
574	17.295	28.008	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
575	17.196	28.011	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
576	16.999	28.008	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				

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Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
577	16.891	28.005	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
578	16.792	28.007	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
579	16.699	28.004	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
580	16.495	28.006	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
581	16.394	28.009	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
582	16.290	28.015	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
583	16.196	28.010	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
584	9.325	25.906	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ			
585	8.911	25.905	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ			
586	9.496	26.011	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
587	9.392	26.009	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
588	9.297	26.006	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
589	9.197	26.004	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
590	9.003	26.012	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
591	8.898	26.006	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
592	8.795	26.012	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
593	8.686	26.009	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
594	21.294	28.215	Mech Inf Bn 2 Task Force	3	fwd	M2	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Tac CP Element		
595	21.351	28.210	Mech Inf Bn 2 Task Force	5	fwd	M2	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Tac CP Element		
596	21.971	28.519	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
597	9.898	28.997	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section			
598	9.956	28.928	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	HQ Sec			
599	10.308	28.998	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section			

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Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
600	10.203	28.998	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section			
601	10.260	28.932	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	HQ Sec			
602	9.995	29.002	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section			
603	19.799	24.606	Mech Inf Bn 2 Task Force	6	Bn HHC	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element		
604	22.504	25.918	Mech Inf Bn 2 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Sec HQ			
605	22.106	25.906	Mech Inf Bn 2 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Sec HQ			
606	12.460	23.842	Mech Inf Bn 2 Task Force	8	3 TFA	M577	HB BSA MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 2	Fire Direction Center 1			
607	12.857	23.843	Mech Inf Bn 2 Task Force	8	3 TFA	M577	HB BSA MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 2	Fire Direction Center 2			
608	18.150	24.013	Mech Inf Bn 2 Task Force	2	Cbt train	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-4 Sec	Cbt trains CP Element		
609	19.796	24.536	Mech Inf Bn 2 Task Force	4	Bn HHC	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-2 Sec	Main CP Element		
610	18.058	24.013	Mech Inf Bn 2 Task Force	3	Cbt train	M577	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element		
611	16.692	23.013	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
612	16.746	22.942	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
613	16.797	22.945	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
614	16.850	22.948	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
615	16.101	23.000	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
616	16.299	23.015	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
617	16.494	23.007	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2	
618	16.642	23.012	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
619	16.849	23.009	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
620	16.549	22.933	Mech Inf Bn 2 Task Force	2	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
621	18.699	29.056	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 1
622	18.700	28.951	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 2

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
623	18.803	29.056	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 3
624	18.800	28.952	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 4
625	18.895	29.057	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 5
626	18.894	28.945	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2				Eng Sqd 6
627	19.005	29.055	Mech Inf Bn 2 Task Force	2	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 1			
628	19.003	28.949	Mech Inf Bn 2 Task Force	2	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 1			
629	19.193	29.006	Mech Inf Bn 2 Task Force	3	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3		Co HQ			
630	21.326	28.133	Mech Inf Bn 2 Task Force	1+1+2	fwd	M113	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Tac CP Element		
631	21.401	25.959	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
632	16.794	25.948	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
633	9.003	24.067	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ			
634	14.486	28.839	Mech Inf Bn 2 Task Force	4	line	M113	HB FM MtC	Mech Inf Bn 2	AA Co		HQ			
635	13.851	28.915	Mech Inf Bn 2 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
636	14.853	28.922	Mech Inf Bn 2 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
637	14.327	28.917	Mech Inf Bn 2 Task Force	3	line	M113	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
638	16.050	23.000	Mech Inf Bn 2 Task Force	6	Maint	M13	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			AA Co Maint Team	
639	16.241	23.016	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
640	16.446	23.003	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3	
641	14.697	29.012	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
642	14.497	29.005	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
643	14.397	29.006	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
644	14.295	29.014	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
645	14.193	29.009	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
646	14.000	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
647	13.910	29.002	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
648	13.802	29.011	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
649	13.698	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
650	15.002	28.999	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
651	14.906	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
652	14.799	29.006	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt				
653	11.009	29.807	Mech Inf Bn 2 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2				GSR SQUAD 1
654	11.011	29.702	Mech Inf Bn 2 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2				GSR SQUAD 1
655	18.499	29.000	Mech Inf Bn 2 Task Force	8	3 TFA	2 CEV (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 2			
656	17.757	23.952	Mech Inf Bn 2 Task Force	4	3 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 1			
657	9.201	25.784	Mech Inf Bn 2 Task Force	4	3 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 1			
658	*	18.138	17.962	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
659	21.433	25.945	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
660	21.362	25.950	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
661	11.945	23.287	Mech Inf Bn 2 Task Force	3	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Batt HQ			
662	16.562	22.997	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 4	
663	16.365	22.998	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 4	
664	16.164	22.999	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 4	
665	18.125	23.910	Mech Inf Bn 2 Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station			
666	*	12.931	19.598	BSA Task Force	4	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Sprrt Plt	Trans Sec		
667	*	12.317	19.491	BSA Task Force	12	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC	Mess Sec			
668	11.795	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
669	11.842	23.201	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			
670	11.895	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			
671	11.946	23.198	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			
672	11.994	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			
673	12.039	23.196	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec			
674	19.101	28.996	Mech Inf Bn 2 Task Force	3	3 TFA	Truck	HB FM MtC	Eng Bn	Eng Co 3		Co HQ			
675	* 18.397	17.990	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 3		Co HQ			
676	* 12.192	19.492	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Mess Sec			
677	* 12.542	19.394	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
678	* 12.890	19.406	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element		
679	* 12.956	19.406	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element		
680	16.296	22.933	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
681	16.235	22.940	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
682	16.190	22.928	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
683	16.896	22.930	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
684	16.136	22.929	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec			
685	16.641	22.928	Mech Inf Bn 2 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
686	16.494	22.924	Mech Inf Bn 2 Task Force	3	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
687	16.440	22.920	Mech Inf Bn 2 Task Force	4	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
688	16.390	22.926	Mech Inf Bn 2 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
689	16.350	22.931	Mech Inf Bn 2 Task Force	6	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec			
690	16.896	23.000	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team1	
691	16.001	22.991	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			AA Co Maint Team	

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
692	*	12.685	19.399	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
693	*	12.747	19.397	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
694	*	12.838	19.408	BSA Task Force	4	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		S-1 Sec		
695		8.972	24.054	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ		
696		16.767	22.987	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
697		16.828	25.940	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ		
698		9.029	24.053	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ		
699		16.757	25.938	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ		
700		19.394	25.992	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec		
701		19.317	24.557	Mech Inf Bn 2 Task Force	2	3 TF HHC Area	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt		Missile Team	
702		22.076	28.418	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt		Missile Team	
703		18.813	27.821	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt		Missile Team	
704		9.445	25.819	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt		Missile Team	
705		17.004	27.820	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt		Missile Team	
706		21.720	28.201	Mech Inf Bn 2 Task Force	4	3 TFA	2 Volcano (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
707		12.902	24.008	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
708		12.999	24.009	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
709		12.395	24.004	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
710		12.311	24.005	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
711		12.600	24.007	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
712		12.497	24.007	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
713		12.695	24.010	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
714		12.801	24.013	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		

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Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
715	22.588	26.007	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
716	22.004	26.006	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
717	22.104	26.006	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
718	22.503	26.012	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
719	22.392	26.009	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
720	22.186	26.003	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt				Mortar Squad
721	19.546	27.857	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 5	
722	17.115	27.880	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 6	
723	9.493	25.876	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 7	
724	22.161	28.479	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB				Mech Inf FIST Tm 8	
725	12.805	23.915	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
726	12.900	23.910	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
727	12.997	23.909	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
728	12.313	23.904	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
729	18.395	29.001	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec			
730	12.394	23.906	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
731	12.497	23.905	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
732	12.598	23.906	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
733	12.698	23.904	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Howitzer Sec			
734	* 18.172	18.053	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec			
735	* 12.647	19.408	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
736	* 12.592	19.404	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec			
737	* 12.719	19.510	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team			

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Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
738	*	12.927	19.510	BSA Task Force	8	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team		
739	*	12.496	19.604	BSA Task Force	5	Fld train	HEMMT (5 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Sprt Plt	Trans Sec		
740	*	12.521	19.496	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team		
741	*	12.723	19.598	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Trans Sec		
742		16.695	22.940	Mech Inf Bn 2 Task Force	1	Maint	Wrecker HEMMT	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
743		18.009	23.927	Mech Inf Bn 2 Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station		
744		18.059	23.922	Mech Inf Bn 2 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station		
745		18.002	23.818	Mech Inf Bn 2 Task Force	14	Cbt train	Ambulances (7 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Evac Sec		
746		18.194	23.815	Mech Inf Bn 2 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Evac Sec		
747	*	15.000	16.755	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		S1 Sec	Rear CP Element	
748	*	21.435	21.006	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element	
749	*	21.543	21.007	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element	
750	*	21.396	20.948	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
751	*	21.435	20.949	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
752	*	21.345	20.949	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
753	*	21.483	21.080	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Bde FSE Sec		
754	*	21.432	21.073	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		TACP Sec	Main CP Element	
755	*	14.953	16.709	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		Co HQ	Rear CP Element	
756	*	21.227	21.010	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Co HQ	Main CP Element	
757	*	21.394	21.073	BSA Task Force	4	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element	
758	*	21.397	21.007	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Bde AD Sec	Main CP	
759	*	14.954	16.752	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		S1 Sec	Rear CP Element	
760	*	14.400	15.346	BSA Task Force	2	FSB	HMMWV	HB BSA MtC		Air Def arty Batt	MSCS Plt	Plt HQ		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
761	*	17.998	18.471	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn	Sprt Plt	Sprt Plt HQ			
762	*	14.929	14.860	BSA Task Force	4	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC	Air Def arty Batt		Batt HQ			
763	*	15.357	15.405	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Air Def arty Batt	Missile Plt	Missile Plt HQ			
764	*	21.197	20.955	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Air Def arty Batt	Gun Plt	Gun Plt HQ			
765	*	21.195	21.014	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Air Def arty Batt	Missile Plt	Missile Sec			
766	*	14.298	15.349	BSA Task Force	9	FSB	3 HMMWV (3 in 1 icon)	HB BSA MtC	Air Def arty Batt	MSCS Plt	Sys Maint Sec			
767	*	17.905	18.470	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn	Sprt Plt	Bn Maint Sec			
768	*	18.003	14.798	BSA Task Force	7	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt	Batt HQ			
769	*	21.345	21.006	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC	S-4 Sec	Main CP Element		
770	*	18.800	19.002	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ	Co HQ			
771	*	18.674	18.999	BSA Task Force	4+3	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ	Admin/Log Sec			
772	*	18.736	18.998	BSA Task Force	4+4	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ	Admin/Log Sec			
773	*	18.870	19.061	BSA Task Force	6	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ	Op/Planning Sec			
774	*	17.506	14.808	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt	Maint Plt HQ			
775	*	18.651	19.059	BSA Task Force	8	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ	Commo Sec			
776	*	17.999	14.606	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt	Ammo Plt HQ			
777	*	18.950	19.002	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ	Commd Sec			
778	*	18.793	15.558	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB			Unit Ministry Team	
779	*	21.348	21.077	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC	Commo Sec	Main CP Element		
780	*	18.842	15.405	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Batt HQ			
781	*	21.287	20.950	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC					FM Retrains Team	
782	*	18.636	15.483	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec		
783	*	18.794	15.483	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Plt HQ		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
784	*	18.591	15.481	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec		
785	*	18.685	15.488	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec		
786	*	18.543	15.483	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec		
787	*	18.902	15.479	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec		
788	*	18.949	15.474	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec		
789	*	18.949	15.405	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Commd Sec		
790	*	18.844	15.477	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec		
791	*	18.996	15.472	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec		
792	*	18.997	15.406	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Commd Sec		
793	*	18.439	15.487	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec		
794	*	18.489	15.483	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec		
795	*	18.739	15.483	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Plt HQ		
796	*	21.289	21.080	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element	
797	*	21.236	21.082	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Rear CP Element	
798	*	18.846	15.549	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB			Pers/Admin Cen	
799	*	18.400	15.488	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec		
800	*	16.425	15.736	BSA Task Force	18	FSB	6 HMMWV (6 in 1 icon)	HB BSA MtC			MP Plt			2 MP Sqds
801	*	16.249	15.746	BSA Task Force	3	FSB	HMMWV	HB BSA MtC			MP Plt	HQ		
802		20.902	36.117	Tank Bn Task Force	2	Bn HHC	HMMWV	HB BSA MtC	Tank Bn	HHC		S-3 Sec	(Carried On arty Bn TOE)	
803		10.543	35.904	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		FSE Section		
804	*	18.624	18.999	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Asst Bde Engr Sec		
805	*	18.490	15.405	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Survey Plt	Plt HQ		
806		19.743	24.530	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		FSE Section		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
807	*	21.591	21.005	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Cmd Sec	Main CP Element	
808	*	21.594	20.934	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Cmd Sec	Main CP Element	
809	*	14.896	16.752	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		Fast Section	Rear CP	
810		24.214	42.906	Tank Bn Task Force	18	fwd	gen (6 in 1 icon)	HB FM MtC			Smoke Plt			2 Smoke Sqds (6 tms)
811	*	15.001	16.717	BSA Task Force	3	FSB	M577	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element	
812	*	14.851	16.757	BSA Task Force	5	FSB	M577	HB BSA MtC	Bde HQ	HHC		S-4 Sec	Rear CP Element	
813	*	14.991	14.868	BSA Task Force	2	FSB	M577	HB BSA MtC		Air Def arty Batt		Batt HQ		
814	*	18.952	19.064	BSA Task Force	6	FSB	2 M577 (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Op/Planning Sec		
815	*	18.545	15.420	BSA Task Force	4	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Intel Sec		
816	*	18.738	15.415	BSA Task Force	5	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Fire Dir Sec		
817	*	21.482	20.952	BSA Task Force	5	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
818	*	21.543	20.952	BSA Task Force	5	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
819	*	21.488	21.012	BSA Task Force	4	Bde HHC	M557	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element	
820	*	21.279	21.019	BSA Task Force	4	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		Bde Eng Sec	Main CP	
821	*	21.543	21.086	BSA Task Force	2	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		Bde FSE Sec		
822		20.589	39.903	Tank Bn Task Force	4+2+2	fwd	M577	HB FM MtC	Bde HQ	HHC		S3 Sec	Tac CP Element	
823	*	17.948	18.476	BSA Task Force	2	FSB	Vehicle-Medium/M88	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec		
824	*	14.955	16.670	BSA Task Force	3	FSB	Vehicle-Medium/M88	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element	
825	*	14.848	16.661	BSA Task Force	3	FSB	Vehicle-Medium/M88	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element	
826	*	14.800	16.654	BSA Task Force	3	FSB	Vehicle-Medium/M88	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element	
827	*	14.894	16.655	BSA Task Force	3	FSB	Vehicle-Medium/M88	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element	
828	*	15.029	18.531	BSA Task Force	3	FSB	M113	HB BSA MtC			ADA Plt (from Corps)	Plt HQ		
829		20.592	39.807	Tank Bn Task Force	6+2	fwd	M113	HB FM MtC	Bde HQ	HHC		Cmd Sec	Tac CP Element	

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
830	*	21.234	20.953	BSA Task Force	2	Bde HHC	M113	HB BSA MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ		
831	*	18.999	19.004	BSA Task Force	5	FSB	M113	HB BSA MtC	Eng Bn	HHQ		Commnd Sec		
832	*	18.739	19.068	BSA Task Force	4	FSB	M113	HB BSA MtC	Eng Bn	HHQ		Tac Sec		
833		24.194	42.802	Tank Bn Task Force	3	fwd	M113	HB FM MtC			Smoke Plt	Plt HQ		
834	*	21.402	20.598	BSA Task Force	4	Bde HHC	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt			Gun Sqd
835	*	10.184	20.652	BSA Task Force	4	FSB	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt			Gun Sqd
836	*	15.895	13.986	BSA Task Force	4	FSB	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt			Gun Sqd
837		20.946	36.123	Tank Bn Task Force	2	Bn HHC	CoLT	HB FM MtC	Tank Bn	HHC		S-3 Sec	(Carried On arty Bn TOE)	
838		10.494	35.913	Mech Inf Bn 1 Task Force	2	Bn HHC	CoLT	HB FM MtC	Mech Inf Bn 1	HHC		FSE Section		
839		19.695	24.541	Mech Inf Bn 2 Task Force	2	Bn HHC	CoLT	HB FM MtC	Mech Inf Bn 2	HHC		FSE Section		
840		21.078	35.990	Tank Bn Task Force	4	1 TFA	Chaparral	HB FM MtC			ADA Plt (from Corps)			Chaparral Sqds
841		10.649	35.769	Mech Inf Bn 1 Task Force	4	2 TFA	Chaparral	HB FM MtC			ADA Plt (from Corps)			Chaparral Sqds
842		19.723	24.211	Mech Inf Bn 2 Task Force	4	3 TFA	Chaparral	HB FM MtC			ADA Plt (from Corps)			Chaparral Sqds
843	*	15.002	18.612	BSA Task Force	4	FSB	Chaparral	HB BSA MtC			ADA Plt (from Corps)			Chaparral Sqds
844		11.003	48.819	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2			GSR SQUAD 2
845		11.000	48.912	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2			GSR SQUAD 2
846	*	17.548	14.720	BSA Task Force	33	FSB	3 Trucks (3 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt			3 FB Maint Tms	
847	*	17.452	14.713	BSA Task Force	7	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt		SVC Batt Maint Sec		
848	*	17.619	14.598	BSA Task Force	28	FSB	14 Trucks (14 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt		2 Ammo Secs		
849	*	17.847	14.523	BSA Task Force	14	FSB	7 Trucks (7 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt		Ammo Sec		
850	*	17.645	14.519	BSA Task Force	5	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt		Food Svc Sec		
851	*	17.522	14.526	BSA Task Force	16	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt		Food Svc Sec		
852	*	17.775	18.473	BSA Task Force	40	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
853	*	14.322	15.398	BSA Task Force	16	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC		Air Def arty Batt	MSCS Plt	Motor Maint Sec		
854	*	17.942	18.391	BSA Task Force	2	FSB	Truck	HB BSA MtC	Eng Bn		Sprt Plt	Transp Sec		
855	*	17.799	18.399	BSA Task Force	5	FSB	5 Trucks (5 in 1 icon)	HB BSA MtC	Eng Bn		Sprt Plt	Transp Sec		
856	*	17.750	14.796	BSA Task Force	9	FSB	9 Trucks (9 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Supply Sec		
857	*	14.991	14.782	BSA Task Force	10	FSB	5 Trucks (5 in 1 icon)	HB BSA MtC		Air Def arty Batt		Batt HQ		
858	*	18.573	19.060	BSA Task Force	12	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Food Serv Sec		
859	*	18.800	19.065	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	HHQ		Op/Planning Sec		
860	*	18.868	18.997	BSA Task Force	4	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Co HQ		
861	*	18.943	15.543	BSA Task Force	2+4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB			Treatment Tm	
862	*	18.900	15.398	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB		Batt HQ		
863	*	14.959	18.529	BSA Task Force	2	FSB	Truck	HB BSA MtC			ADA Plt (from Corps)	Plt HQ		
864	*	17.794	14.710	BSA Task Force	24	FSB	3 Trucks (3 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Maintenance Sec		
865	*	18.790	15.396	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB		Batt HQ		
866	*	15.393	15.391	BSA Task Force	1	FSB	Truck	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Plt HQ		
867	*	15.299	15.393	BSA Task Force	1	FSB	Truck	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Plt HQ		
868	*	17.645	14.717	BSA Task Force	10	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt			HQ Batt Maint. Tm	
869	*	14.796	16.695	BSA Task Force	3	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Maint Sec	Rear CP Element	
870	*	18.683	15.404	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB		Fire Dir Sec		
871	*	15.186	16.535	BSA Task Force	4	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC			Smoke Plt			Sppt Sqd
872	*	17.453	14.800	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt		Maint Plt HQ		
873	*	18.898	15.544	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB			Pers/Admin Cen	
874	*	14.892	16.705	BSA Task Force	3	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Co HQ	Rear CP Element	
875	*	14.798	16.747	BSA Task Force	5	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Mess Sec		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
876	*	14.848	16.708	BSA Task Force	4	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Maint Sec	Rear CP Element	
877		14.600	51.517	Mech Inf Bn 1 Task Force	3	fwd	with AN/TRQ-30	HB FM MtC				COLLECTION TEAM		
878	*	21.082	20.967	BSA Task Force	2	Bde HHC	HMMWV armed w/Stinger	HB BSA MtC	Air Def arty Batt	Missile Plt			Missile Team	
879	*	17.501	20.109	BSA Task Force	2	FSB	HMMWV armed w/Stinger	HB BSA MtC	Air Def arty Batt	Missile Plt			Missile Team	
880	*	11.112	13.965	BSA Task Force	2	FSB	HMMWV armed w/Stinger	HB BSA MtC	Air Def arty Batt	Missile Plt			Missile Team	
881	*	11.315	20.000	BSA Task Force	2	FSB	HMMWV armed w/Stinger	HB BSA MtC	Air Def arty Batt	Missile Plt			Missile Team	
882	*	19.020	13.167	BSA Task Force	2	FSB	HMMWV armed w/Stinger	HB BSA MtC	Air Def arty Batt	Missile Plt			Missile Team	
883	*	17.944	14.715	BSA Task Force	6	FSB	Vehicles-Light/M578 (3	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Maintenance Sec		
884	*	15.000	16.667	BSA Task Force	3	FSB	Vehicle-Light/M578	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element	
885	*	17.712	14.726	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Maintenance Sec		
886	*	17.630	18.485	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec		
887	*	18.486	15.329	BSA Task Force	3	FSB	HEMMT (3 in 1 icon)	HB BSA MtC	Fld arty Bn	HHB			Fld trains	
888	*	14.197	15.362	BSA Task Force	1	FSB	2-1/2 ton van-shop	HB BSA MtC	Air Def arty Batt	MSCS Plt	Sys Maint Sec			
889	*	18.997	15.547	BSA Task Force	2	FSB	HMMWV ambulance	HB BSA MtC	Fld arty Bn	HHB			Treatment Tm	
890	*	18.440	15.406	BSA Task Force	2	Bde HHC	HMMWV ambulance	HB BSA MtC	Fld arty Bn	HHB			Amb. Team	
891	*	11.792	14.752	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commo Br		
892	*	11.741	14.747	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Sprt Op Sec		
893	*	11.645	14.745	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		S-4 Sec		
894	*	11.596	14.742	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment			Unit Ministry Team	
895	*	10.238	14.607	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ		
896	*	10.093	14.596	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ		
897	*	9.997	14.603	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Plt HQ		
898	*	10.039	15.353	BSA Task Force	7	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Class V (ATP) Sec		

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Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
899	*	10.234	14.997	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec		
900	*	16.022	13.496	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt	Plt HQ		
901	*	16.245	13.555	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ		
902	*	9.797	15.202	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section		
903	*	16.394	13.557	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ		
904	*	19.152	16.827	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Co HQ		
905	*	15.501	13.490	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt	Plt HQ		
906	*	19.286	16.899	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec		
907	*	19.194	16.828	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Co HQ		
908	*	19.152	16.901	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Plt HQ		
909	*	18.885	16.902	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Armt Maint Rep Sec		
910	*	19.239	16.901	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec		
911	*	17.490	16.998	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
912	*	18.695	16.902	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Plt HQ		
913	*	17.539	17.001	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
914	*	18.004	17.005	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Arty Sprt Team	
915	*	17.953	16.928	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec		
916	*	18.006	16.927	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec		
917	*	18.056	16.923	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec		
918	*	18.099	16.922	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
919	*	17.894	16.929	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec		
920	*	12.051	14.750	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commnd Sec		
921	*	12.100	14.746	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commnd Sec		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
922	*	12.000	14.751	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		PAC Sec		
923	*	11.948	14.751	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		PAC Sec		
924	*	11.897	14.751	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Plans-Ops Br		
925	*	11.847	14.752	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commo Br		
926	*	15.144	16.924	BSA Task Force	2	FSB	HMMWV	HB FM MtC			GSR Plt 1	Plt HQ		
927	*	18.594	15.407	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Ops Sec		
928	*	15.195	16.924	BSA Task Force	2	FSB	HMMWV	HB FM MtC			GSR Plt 2	Plt HQ		
929	*	16.150	13.561	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Squad
930	*	16.107	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Squad
931	*	16.056	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Squad
932	*	16.003	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Squad
933	*	18.637	15.415	BSA Task Force	4	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Ops Sec		
934	*	17.893	16.999	BSA Task Force	2	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
935	*	18.196	17.004	BSA Task Force	3	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Arty Sprt Team	
936	*	17.843	17.001	BSA Task Force	2	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
937	*	9.754	15.194	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section		
938	*	9.699	15.192	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section		
939	*	9.654	15.193	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section		
940	*	16.341	13.548	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ		
941	*	16.289	13.547	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ		
942	*	15.976	13.476	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt	Plt HQ		
943	*	19.301	16.815	BSA Task Force	16	FSB	4 Truck (4 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Co HQ		
944	*	15.744	13.549	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Patient Holding Sqd

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
945	*	15.789	13.555	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Patient Holding Sqd
946	*	10.190	14.595	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ		
947	*	10.142	14.596	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ		
948	*	10.195	14.995	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec		
949	*	18.996	16.900	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Armt Maint Rep Sec		
950	*	18.521	16.997	BSA Task Force	12	FSB	12 Truck (12 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordnance Co		Class I* Sprt Sec		
951	*	18.949	16.902	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Armt Maint Rep Sec		
952	*	18.150	17.000	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Arty Sprt Team	
953	*	18.055	17.000	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Arty Sprt Team	
954	*	18.098	16.998	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Arty Sprt Team	
955	*	18.498	16.900	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Grd Sprt Equip Rep Sec		
956	*	17.792	17.000	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Eng System Sprt Team	
957	*	17.746	16.997	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Eng System Sprt Team	
958	*	17.696	16.997	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co			Eng System Sprt Team	
959	*	18.643	16.902	BSA Task Force	9	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Svc/Recovery Sec		
960	*	18.452	16.901	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Grd Sprt Equip Rep Sec		
961	*	18.400	16.901	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
962	*	18.350	16.901	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
963	*	18.299	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
964	*	18.250	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
965	*	18.196	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
966	*	18.145	16.907	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec		
967	*	17.841	16.917	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec		

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
968	*	11.844	14.672	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
969	*	11.788	14.673	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
970	*	12.047	14.672	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
971	*	11.992	14.668	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
972	*	11.942	14.671	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
973	*	11.892	14.671	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ		
974	*	10.352	15.004	BSA Task Force	2	FSB	Semi-trailer flatbed	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec		
975	*	10.399	15.002	BSA Task Force	2	FSB	Semi-trailer flatbed	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec		
976	*	19.263	16.995	BSA Task Force	6	FSB	flatbed (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Class I* Sprt Sec		
977	*	9.723	15.287	BSA Task Force	10	FSB	POL (10 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section		
978	*	19.336	16.911	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec		
979	*	10.298	15.004	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec		
980	*	19.390	16.905	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec		
981	*	18.972	16.996	BSA Task Force	6	FSB	van (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Class I* Sprt Sec		
982	*	16.198	13.556	BSA Task Force	2	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ		
983	*	10.044	14.609	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ		
984	*	18.538	16.909	BSA Task Force	2	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Svc/Recovery Sec		
985	*	18.587	16.905	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Svc/Recovery Sec		
986	*	17.597	17.004	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
987	*	9.999	15.357	BSA Task Force	7	FSB	5 ton tractor	HB BSA MtC	Fwd Sprt Bn	Supply Co		Class V (ATP) Sec		
988	*	17.649	17.006	BSA Task Force	2	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Eng System Sprt Team	
989	*	15.839	13.561	BSA Task Force	4	FSB	5 ton van e* pansible	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Area Sppt Sqd
990	*	15.892	13.562	BSA Task Force	4	FSB	5 ton van e* pansible	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Sqd, Area

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Table A2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
991	*	15.941	13.557	BSA Task Force	4	FSB	5 ton van e*pansible	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt			Treatment Sqd, Area
992	*	18.792	16.910	BSA Task Force	6	FSB	vans (3 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Armt Maint Rep Sec		
993	*	19.192	16.912	BSA Task Force	3	FSB	5 ton van e*p	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec		
994	*	19.043	16.912	BSA Task Force	8	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Autmv Maint Rep Sec		
995	*	11.693	14.753	BSA Task Force	2	FSB	5 ton van- e*pansible	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Sprt Op Sec		
996	*	19.096	16.911	BSA Task Force	7	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Autmv Maint Rep Sec		
997	*	17.947	17.000	BSA Task Force	2	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordance Co			Arty Sprt Team	
998	*	15.618	13.553	BSA Task Force	8	FSB	ambulance (4 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt			2 Amb Sqds, wheel
999	*	15.370	13.551	BSA Task Force	12	FSB	ambulance (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt			3 Ambl Sqds, track

* Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalions, Movement to Contact."

Figure A1
Brigade Layout by Task Force
Heavy Brigade, Movement to Contact

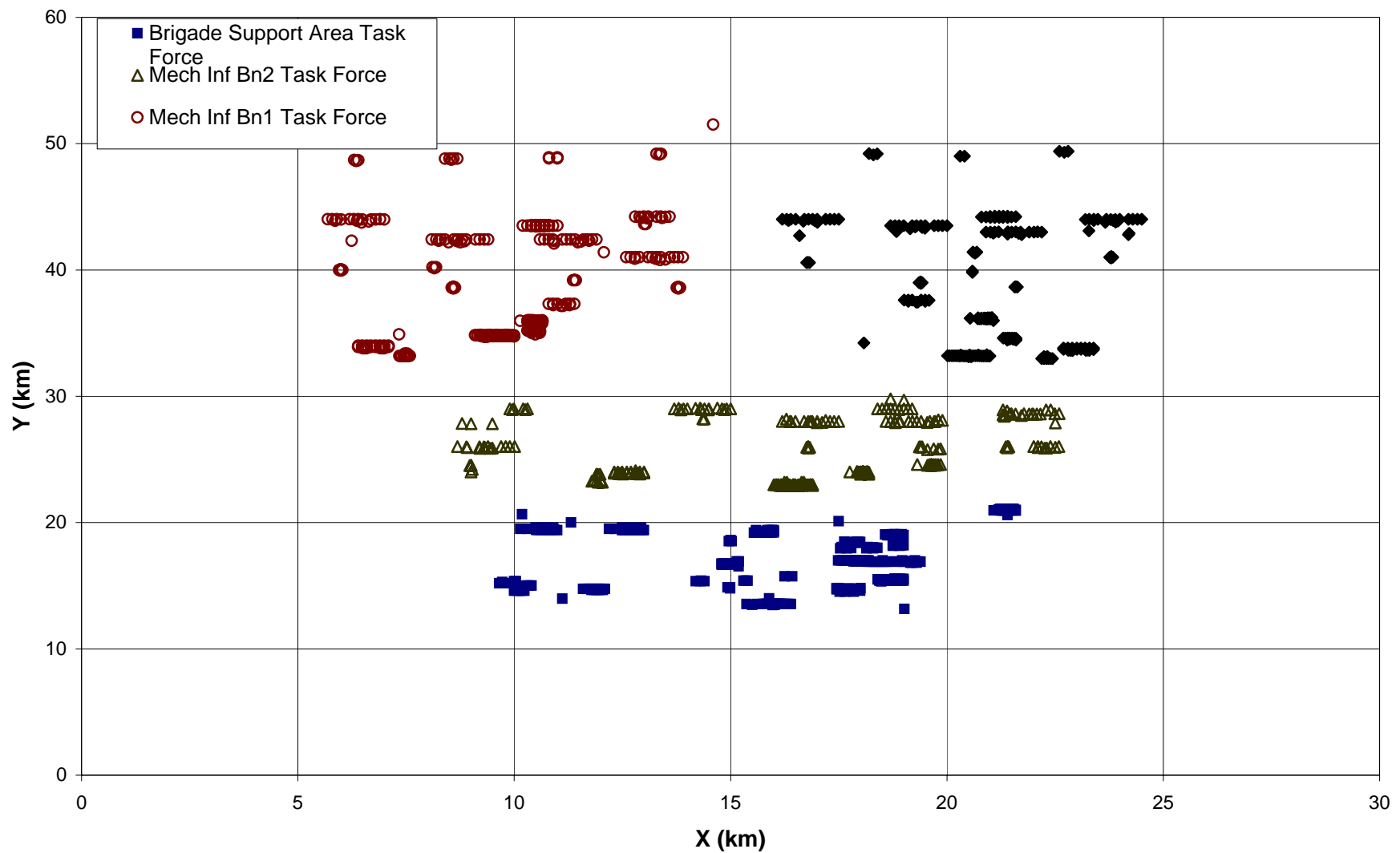


Figure A2
Unit Layout: Standard Scale
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

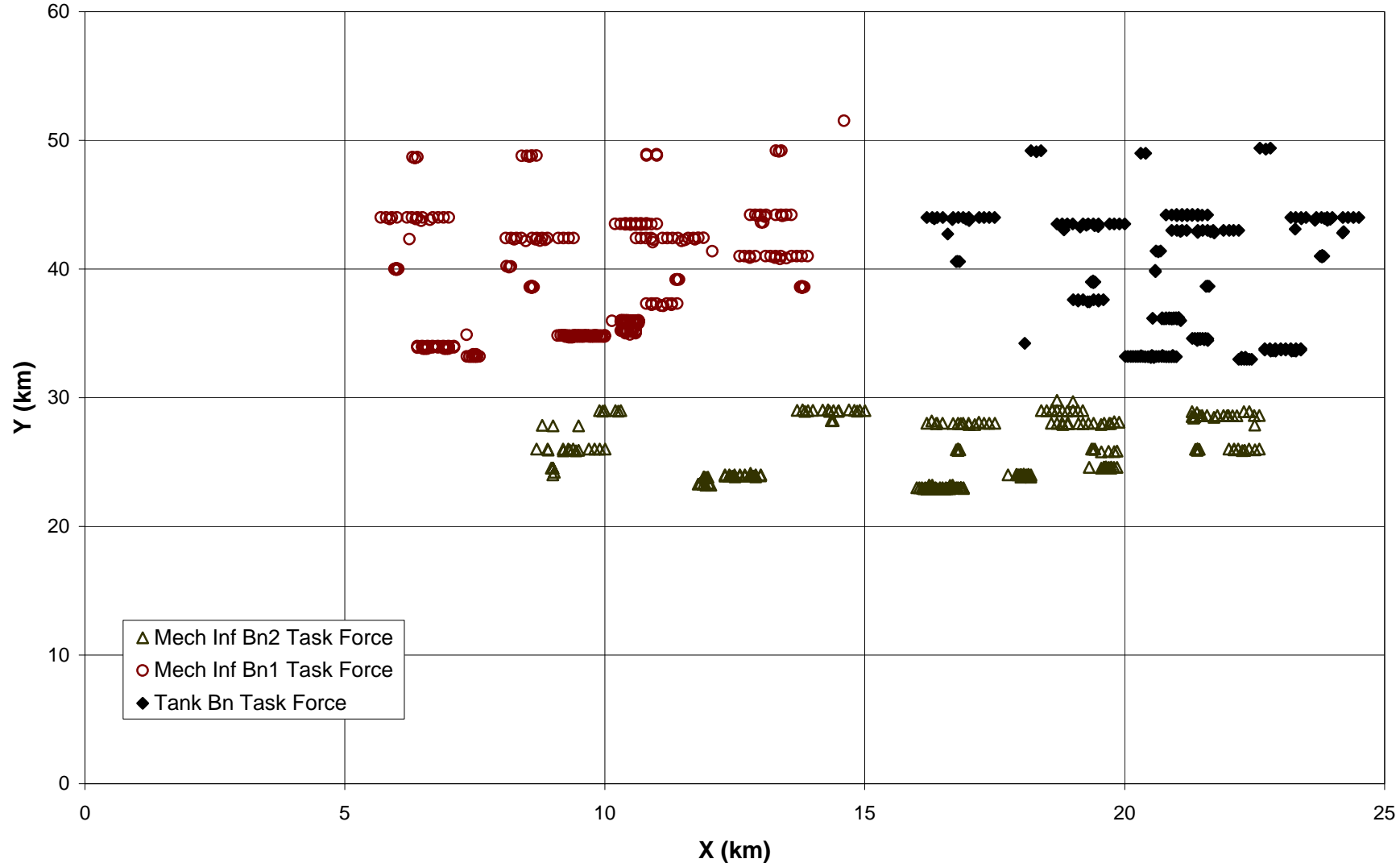


Figure A3
Unit Layout: Small Scale
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

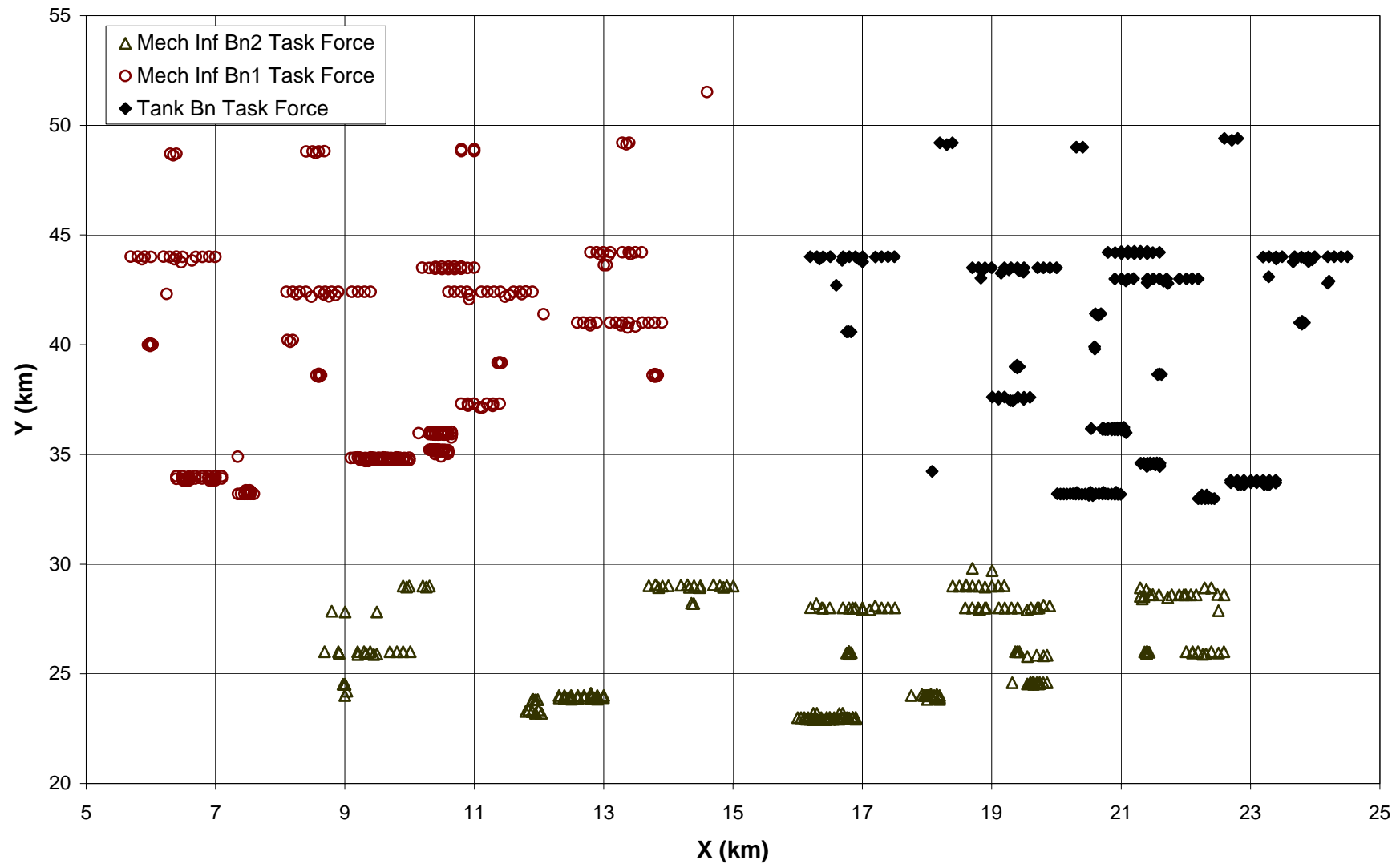


Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Sarin (GB) 152mm Artillery
Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (20.25, 34.00)							
117	20.256	33.206	3	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.26E-01	2.87E+01	5
134	20.300	33.198	4	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
136	20.211	33.205	4	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
180	20.316	33.264	16	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
Case 2: Protected				18 rounds at aimpoint (10.55, 43.45)							
361	10.504	43.454	8	1.79E+01	0.00E+00	1.79E+01	1.97E+02	0.00E+00	8.67E-01	1.88E+01	5
363	10.602	43.452	8	3.84E+00	0.00E+00	3.84E+00	3.45E+02	0.00E+00	1.52E+00	5.36E+00	3
365	10.602	43.552	8	0.00E+00	0.00E+00	0.00E+00	2.68E-02	0.00E+00	1.18E-04	1.18E-04	1
382	10.502	43.550	8	8.36E+00	0.00E+00	8.36E+00	1.17E+01	0.00E+00	5.15E-02	8.41E+00	4

Sarin (GB) MRLS

Moderate Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (20.55, 35.35)							
67	20.501	33.135	1	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
68	20.561	33.131	1	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
69	20.605	33.207	2	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.40E-02	1.92E+01	5
115	20.711	33.203	2	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.88E-02	1.80E+01	5
117	20.256	33.206	3	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.84E-02	6.49E+00	4
118	20.349	33.200	3	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
119	20.658	33.204	2	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
120	20.161	33.203	3	8.20E-01	0.00E+00	8.20E-01	8.20E-01	0.00E+00	3.61E-03	8.24E-01	2
121	20.757	33.205	2	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5
133	20.115	33.201	4	6.70E-02	0.00E+00	6.70E-02	6.70E-02	0.00E+00	2.95E-04	6.73E-02	1
134	20.300	33.198	4	9.59E+00	0.00E+00	9.59E+00	9.59E+00	0.00E+00	4.22E-02	9.63E+00	4
136	20.211	33.205	4	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.48E-02	3.37E+00	3
165	20.395	33.192	4	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
168	20.555	33.205	2	2.00E+01	0.00E+00	2.00E+01	2.00E+01	0.00E+00	8.80E-02	2.01E+01	5
172	20.494	33.196	4	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
174	20.901	33.191	1	3.88E+00	0.00E+00	3.88E+00	3.88E+00	0.00E+00	1.71E-02	3.90E+00	3
175	20.950	33.190	1	8.85E-01	0.00E+00	8.85E-01	8.85E-01	0.00E+00	3.89E-03	8.89E-01	2
176	20.850	33.193	1	8.94E+00	0.00E+00	8.94E+00	8.94E+00	0.00E+00	3.93E-02	8.98E+00	4
177	20.993	33.189	1	2.78E-02	0.00E+00	2.78E-02	2.78E-02	0.00E+00	1.22E-04	2.79E-02	1
178	20.801	33.194	1	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
179	20.448	33.195	4	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
180	20.316	33.264	16	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.72E-02	1.31E+01	4
181	20.923	33.281	16	3.55E+00	0.00E+00	3.55E+00	3.55E+00	0.00E+00	1.56E-02	3.57E+00	3
182	20.725	33.278	16	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5
183	20.524	33.279	16	2.49E+01	0.00E+00	2.49E+01	2.49E+01	0.00E+00	1.10E-01	2.50E+01	5
Case 2: Protected				240 rounds at aimpoint (20.60, 33.25)							
67	20.501	33.135	1	7.20E+00	0.00E+00	7.20E+00	4.39E+02	0.00E+00	1.93E+00	9.13E+00	4
68	20.561	33.131	1	6.70E+01	0.00E+00	6.70E+01	5.15E+02	0.00E+00	2.27E+00	6.93E+01	7
69	20.605	33.207	2	1.17E+02	0.00E+00	1.17E+02	6.30E+02	0.00E+00	2.77E+00	1.20E+02	8
115	20.711	33.203	2	9.10E+01	0.00E+00	9.10E+01	5.68E+02	0.00E+00	2.50E+00	9.35E+01	8
117	20.256	33.206	3	1.94E+01	0.00E+00	1.94E+01	3.53E+01	0.00E+00	1.55E-01	1.96E+01	5
118	20.349	33.200	3	2.43E+01	0.00E+00	2.43E+01	2.02E+02	0.00E+00	8.89E-01	2.52E+01	5
119	20.658	33.204	2	1.46E+02	0.00E+00	1.46E+02	5.47E+02	0.00E+00	2.41E+00	1.48E+02	8
121	20.757	33.205	2	2.51E+02	0.00E+00	2.51E+02	7.33E+02	0.00E+00	3.23E+00	2.54E+02	8
134	20.300	33.198	4	3.30E+00	0.00E+00	3.30E+00	1.42E+02	0.00E+00	6.25E-01	3.92E+00	3
165	20.395	33.192	4	1.66E+02	0.00E+00	1.66E+02	3.98E+02	0.00E+00	1.75E+00	1.68E+02	8
168	20.555	33.205	2	5.29E+01	0.00E+00	5.29E+01	3.88E+02	0.00E+00	1.71E+00	5.46E+01	7
172	20.494	33.196	4	7.86E+01	0.00E+00	7.86E+01	5.40E+02	0.00E+00	2.38E+00	8.10E+01	8
174	20.901	33.191	1	4.36E+01	0.00E+00	4.36E+01	3.06E+02	0.00E+00	1.35E+00	4.49E+01	6
176	20.850	33.193	1	1.25E+01	0.00E+00	1.25E+01	2.92E+02	0.00E+00	1.28E+00	1.38E+01	4
178	20.801	33.194	1	4.65E+02	0.00E+00	4.65E+02	1.05E+03	0.00E+00	4.62E+00	4.70E+02	8
179	20.448	33.195	4	5.48E+02	0.00E+00	5.48E+02	1.26E+03	0.00E+00	5.54E+00	5.54E+02	8
180	20.316	33.264	16	2.01E+02	0.00E+00	2.01E+02	4.24E+02	0.00E+00	1.87E+00	2.03E+02	8
181	20.923	33.281	16	1.10E+02	0.00E+00	1.10E+02	1.95E+02	0.00E+00	8.58E-01	1.11E+02	8

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

182	20.725	33.278	16	2.02E-03	0.00E+00	2.02E-03	5.03E+01	0.00E+00	2.21E-01	2.23E-01	1
183	20.524	33.279	16	1.17E+02	0.00E+00	1.17E+02	6.15E+02	0.00E+00	2.71E+00	1.20E+02	8

Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 720 rounds at aimpoint (18.30, 20.15)											
38	18.902	18.161	2	8.16E+00	0.00E+00	8.16E+00	8.16E+00	0.00E+00	3.59E-02	8.20E+00	4
40	18.900	18.232	2	8.75E+00	0.00E+00	8.75E+00	8.75E+00	0.00E+00	3.85E-02	8.79E+00	4
42	18.948	18.195	2	4.48E+00	0.00E+00	4.48E+00	4.48E+00	0.00E+00	1.97E-02	4.50E+00	3
147	18.748	18.163	7	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5
154	18.999	18.190	3	1.71E+00	0.00E+00	1.71E+00	1.71E+00	0.00E+00	7.52E-03	1.72E+00	2
220	18.777	18.253	4	2.77E+01	0.00E+00	2.77E+01	2.77E+01	0.00E+00	1.22E-01	2.78E+01	5
282	17.696	17.960	2	7.01E+00	0.00E+00	7.01E+00	7.01E+00	0.00E+00	3.08E-02	7.04E+00	4
284	17.741	17.997	2	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
285	17.693	18.039	2	7.28E+00	0.00E+00	7.28E+00	7.28E+00	0.00E+00	3.20E-02	7.31E+00	4
403	17.533	17.964	7	1.53E-01	0.00E+00	1.53E-01	1.53E-01	0.00E+00	6.73E-04	1.54E-01	1
426	17.792	17.981	3	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.17E-02	1.64E+01	5
479	17.571	18.054	4	7.28E-01	0.00E+00	7.28E-01	7.28E-01	0.00E+00	3.20E-03	7.31E-01	2
524	18.297	18.033	2	4.81E+01	0.00E+00	4.81E+01	4.81E+01	0.00E+00	2.12E-01	4.83E+01	6
525	18.296	17.953	2	4.41E+01	0.00E+00	4.41E+01	4.41E+01	0.00E+00	1.94E-01	4.43E+01	6
526	18.347	17.998	2	4.60E+01	0.00E+00	4.60E+01	4.60E+01	0.00E+00	2.02E-01	4.62E+01	6
658	18.138	17.962	7	4.17E+01	0.00E+00	4.17E+01	4.17E+01	0.00E+00	1.83E-01	4.19E+01	6
675	18.397	17.990	3	4.46E+01	0.00E+00	4.46E+01	4.46E+01	0.00E+00	1.96E-01	4.48E+01	6
734	18.172	18.053	4	4.68E+01	0.00E+00	4.68E+01	4.68E+01	0.00E+00	2.06E-01	4.70E+01	6
761	17.998	18.471	4	5.90E+01	0.00E+00	5.90E+01	5.90E+01	0.00E+00	2.60E-01	5.93E+01	7
767	17.905	18.470	4	4.64E+01	0.00E+00	4.64E+01	4.64E+01	0.00E+00	2.04E-01	4.66E+01	6
770	18.800	19.002	2	4.53E+01	0.00E+00	4.53E+01	4.53E+01	0.00E+00	1.99E-01	4.55E+01	6
771	18.674	18.999	7	9.09E+01	0.00E+00	9.09E+01	9.09E+01	0.00E+00	4.00E-01	9.13E+01	8
772	18.736	18.998	8	7.10E+01	0.00E+00	7.10E+01	7.10E+01	0.00E+00	3.12E-01	7.13E+01	7
773	18.870	19.061	6	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
775	18.651	19.059	8	1.04E+02	0.00E+00	1.04E+02	1.04E+02	0.00E+00	4.58E-01	1.04E+02	8
777	18.950	19.002	4	3.66E+00	0.00E+00	3.66E+00	3.66E+00	0.00E+00	1.61E-02	3.68E+00	3
804	18.624	18.999	3	9.78E+01	0.00E+00	9.78E+01	9.78E+01	0.00E+00	4.30E-01	9.82E+01	8
814	18.952	19.064	6	3.26E+00	0.00E+00	3.26E+00	3.26E+00	0.00E+00	1.43E-02	3.27E+00	3
823	17.948	18.476	2	5.29E+01	0.00E+00	5.29E+01	5.29E+01	0.00E+00	2.33E-01	5.31E+01	7
831	18.999	19.004	5	7.46E-01	0.00E+00	7.46E-01	7.46E-01	0.00E+00	3.28E-03	7.49E-01	2
832	18.739	19.068	4	7.60E+01	0.00E+00	7.60E+01	7.60E+01	0.00E+00	3.34E-01	7.63E+01	8
852	17.775	18.473	40	2.29E+01	0.00E+00	2.29E+01	2.29E+01	0.00E+00	1.01E-01	2.30E+01	5
854	17.942	18.391	2	4.84E+01	0.00E+00	4.84E+01	4.84E+01	0.00E+00	2.13E-01	4.86E+01	6
855	17.799	18.399	5	2.56E+01	0.00E+00	2.56E+01	2.56E+01	0.00E+00	1.13E-01	2.57E+01	5
858	18.573	19.060	12	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
859	18.800	19.065	3	4.87E+01	0.00E+00	4.87E+01	4.87E+01	0.00E+00	2.14E-01	4.89E+01	6
860	18.868	18.997	4	2.03E+01	0.00E+00	2.03E+01	2.03E+01	0.00E+00	8.93E-02	2.04E+01	5
886	17.630	18.485	1	3.59E+00	0.00E+00	3.59E+00	3.59E+00	0.00E+00	1.58E-02	3.61E+00	3
909	18.885	16.902	2	9.33E-01	0.00E+00	9.33E-01	9.33E-01	0.00E+00	4.11E-03	9.37E-01	2
912	18.695	16.902	2	4.95E+00	0.00E+00	4.95E+00	4.95E+00	0.00E+00	2.18E-02	4.97E+00	3
914	18.004	17.005	3	7.98E+00	0.00E+00	7.98E+00	7.98E+00	0.00E+00	3.51E-02	8.02E+00	4
915	17.953	16.928	3	5.58E+00	0.00E+00	5.58E+00	5.58E+00	0.00E+00	2.46E-02	5.60E+00	3
916	18.006	16.927	3	6.26E+00	0.00E+00	6.26E+00	6.26E+00	0.00E+00	2.75E-02	6.29E+00	4
917	18.056	16.923	3	6.79E+00	0.00E+00	6.79E+00	6.79E+00	0.00E+00	2.99E-02	6.82E+00	4
918	18.099	16.922	4	7.12E+00	0.00E+00	7.12E+00	7.12E+00	0.00E+00	3.13E-02	7.15E+00	4
919	17.894	16.929	2	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.06E-02	4.71E+00	3
934	17.893	16.999	2	5.89E+00	0.00E+00	5.89E+00	5.89E+00	0.00E+00	2.59E-02	5.92E+00	3
935	18.196	17.004	3	9.40E+00	0.00E+00	9.40E+00	9.40E+00	0.00E+00	4.14E-02	9.44E+00	4
936	17.843	17.001	2	4.63E+00	0.00E+00	4.63E+00	4.63E+00	0.00E+00	2.04E-02	4.65E+00	3
949	18.996	16.900	2	1.03E-02	0.00E+00	1.03E-02	1.03E-02	0.00E+00	4.53E-05	1.03E-02	1
950	18.521	16.997	12	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.63E-02	8.30E+00	4
951	18.949	16.902	2	1.42E-01	0.00E+00	1.42E-01	1.42E-01	0.00E+00	6.25E-04	1.43E-01	1
952	18.150	17.000	3	9.07E+00	0.00E+00	9.07E+00	9.07E+00	0.00E+00	3.99E-02	9.11E+00	4
953	18.055	17.000	3	8.47E+00	0.00E+00	8.47E+00	8.47E+00	0.00E+00	3.73E-02	8.51E+00	4
954	18.098	16.998	3	8.78E+00	0.00E+00	8.78E+00	8.78E+00	0.00E+00	3.86E-02	8.82E+00	4
955	18.498	16.900	4	6.34E+00	0.00E+00	6.34E+00	6.34E+00	0.00E+00	2.79E-02	6.37E+00	4
956	17.792	17.000	2	3.38E+00	0.00E+00	3.38E+00	3.38E+00	0.00E+00	1.49E-02	3.39E+00	3
957	17.746	16.997	2	2.21E+00	0.00E+00	2.21E+00	2.21E+00	0.00E+00	9.72E-03	2.22E+00	2
958	17.696	16.997	2	1.07E+00	0.00E+00	1.07E+00	1.07E+00	0.00E+00	4.71E-03	1.07E+00	2

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

959	18.643	16.902	9	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
960	18.452	16.901	4	7.00E+00	0.00E+00	7.00E+00	7.00E+00	0.00E+00	3.08E-02	7.03E+00	4
961	18.400	16.901	1	7.61E+00	0.00E+00	7.61E+00	7.61E+00	0.00E+00	3.35E-02	7.64E+00	4
962	18.350	16.901	1	7.83E+00	0.00E+00	7.83E+00	7.83E+00	0.00E+00	3.45E-02	7.86E+00	4
963	18.299	16.903	1	7.64E+00	0.00E+00	7.64E+00	7.64E+00	0.00E+00	3.36E-02	7.67E+00	4
964	18.250	16.903	1	7.40E+00	0.00E+00	7.40E+00	7.40E+00	0.00E+00	3.26E-02	7.43E+00	4
965	18.196	16.903	1	7.15E+00	0.00E+00	7.15E+00	7.15E+00	0.00E+00	3.15E-02	7.18E+00	4
966	18.145	16.907	1	6.98E+00	0.00E+00	6.98E+00	6.98E+00	0.00E+00	3.07E-02	7.01E+00	4
967	17.841	16.917	1	3.40E+00	0.00E+00	3.40E+00	3.40E+00	0.00E+00	1.50E-02	3.41E+00	3
981	18.972	16.996	6	1.62E-01	0.00E+00	1.62E-01	1.62E-01	0.00E+00	7.13E-04	1.63E-01	1
984	18.538	16.909	2	6.24E+00	0.00E+00	6.24E+00	6.24E+00	0.00E+00	2.75E-02	6.27E+00	4
985	18.587	16.905	2	5.96E+00	0.00E+00	5.96E+00	5.96E+00	0.00E+00	2.62E-02	5.99E+00	3
986	17.597	17.004	1	2.84E-02	0.00E+00	2.84E-02	2.84E-02	0.00E+00	1.25E-04	2.85E-02	1
988	17.649	17.006	2	3.06E-01	0.00E+00	3.06E-01	3.06E-01	0.00E+00	1.35E-03	3.07E-01	2
992	18.792	16.910	6	3.15E+00	0.00E+00	3.15E+00	3.15E+00	0.00E+00	1.39E-02	3.16E+00	3
997	17.947	17.000	2	6.94E+00	0.00E+00	6.94E+00	6.94E+00	0.00E+00	3.05E-02	6.97E+00	4

Case 2: Protected 720 rounds at aimpoint (20.70, 32.70)

67	20.501	33.135	1	2.04E+02	0.00E+00	2.04E+02	2.47E+02	0.00E+00	1.09E+00	2.05E+02	8
68	20.561	33.131	1	4.81E+01	0.00E+00	4.81E+01	1.23E+02	0.00E+00	5.41E-01	4.86E+01	6
69	20.605	33.207	2	1.05E+02	0.00E+00	1.05E+02	2.06E+02	0.00E+00	9.06E-01	1.06E+02	8
115	20.711	33.203	2	1.35E+01	0.00E+00	1.35E+01	3.36E+01	0.00E+00	1.48E-01	1.36E+01	4
118	20.349	33.200	3	5.59E-02	0.00E+00	5.59E-02	5.68E-02	0.00E+00	2.50E-04	5.61E-02	1
119	20.658	33.204	2	3.25E+00	0.00E+00	3.25E+00	6.70E+01	0.00E+00	2.95E-01	3.54E+00	3
121	20.757	33.205	2	4.91E+01	0.00E+00	4.91E+01	9.37E+01	0.00E+00	4.12E-01	4.95E+01	6
165	20.395	33.192	4	7.53E+01	0.00E+00	7.53E+01	1.51E+02	0.00E+00	6.64E-01	7.60E+01	8
168	20.555	33.205	2	1.30E+01	0.00E+00	1.30E+01	4.49E+01	0.00E+00	1.98E-01	1.32E+01	4
172	20.494	33.196	4	1.18E+02	0.00E+00	1.18E+02	1.49E+02	0.00E+00	6.56E-01	1.19E+02	8
174	20.901	33.191	1	1.07E+02	0.00E+00	1.07E+02	1.10E+02	0.00E+00	4.84E-01	1.07E+02	8
175	20.950	33.190	1	8.64E-01	0.00E+00	8.64E-01	1.04E+02	0.00E+00	4.58E-01	1.32E+00	2
176	20.850	33.193	1	1.89E+00	0.00E+00	1.89E+00	1.10E+02	0.00E+00	4.84E-01	2.37E+00	2
177	20.993	33.189	1	9.61E+01	0.00E+00	9.61E+01	1.11E+02	0.00E+00	4.88E-01	9.66E+01	8
178	20.801	33.194	1	7.54E-01	0.00E+00	7.54E-01	3.92E+00	0.00E+00	1.72E-02	7.71E-01	2
179	20.448	33.195	4	2.36E+01	0.00E+00	2.36E+01	8.57E+01	0.00E+00	3.77E-01	2.40E+01	5
180	20.316	33.264	16	6.57E-03	0.00E+00	6.57E-03	6.67E-03	0.00E+00	2.93E-05	6.60E-03	1
181	20.923	33.281	16	1.03E+01	0.00E+00	1.03E+01	1.87E+01	0.00E+00	8.23E-02	1.04E+01	4
182	20.725	33.278	16	6.70E+00	0.00E+00	6.70E+00	1.39E+01	0.00E+00	6.12E-02	6.76E+00	4
183	20.524	33.279	16	1.39E+01	0.00E+00	1.39E+01	1.93E+01	0.00E+00	8.49E-02	1.40E+01	4

Sarin (GB) 250kg Bomb
Light Attack
Height of Release: 0m

Height of Release: 0m												
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				2 rounds at aimpoint (20.45, 34.80)								
67	20.501	33.135	1	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3	
68	20.561	33.131	1	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4	
69	20.605	33.207	2	1.90E+01	0.00E+00	1.90E+01	1.90E+01	0.00E+00	8.36E-02	1.91E+01	5	
115	20.711	33.203	2	9.91E+00	0.00E+00	9.91E+00	9.91E+00	0.00E+00	4.36E-02	9.95E+00	4	
117	20.256	33.206	3	6.00E+00	0.00E+00	6.00E+00	6.00E+00	0.00E+00	2.64E-02	6.03E+00	4	
118	20.349	33.200	3	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5	
119	20.658	33.204	2	1.71E+01	0.00E+00	1.71E+01	1.71E+01	0.00E+00	7.52E-02	1.72E+01	5	
134	20.300	33.198	4	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4	
165	20.395	33.192	4	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5	
168	20.555	33.205	2	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4	
172	20.494	33.196	4	5.23E+00	0.00E+00	5.23E+00	5.23E+00	0.00E+00	2.30E-02	5.25E+00	3	
179	20.448	33.195	4	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4	
180	20.316	33.264	16	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5	
182	20.725	33.278	16	7.90E+00	0.00E+00	7.90E+00	7.90E+00	0.00E+00	3.48E-02	7.93E+00	4	
183	20.524	33.279	16	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4	
Case 2: Protected				2 rounds at aimpoint (16.50, 23.00)								
611	16.692	23.013	3	2.03E+01	0.00E+00	2.03E+01	2.70E+01	0.00E+00	1.19E-01	2.04E+01	5	
618	16.642	23.012	4	2.36E+01	0.00E+00	2.36E+01	3.12E+01	0.00E+00	1.37E-01	2.37E+01	5	
640	16.446	23.003	4	1.73E+01	0.00E+00	1.73E+01	2.34E+01	0.00E+00	1.03E-01	1.74E+01	5	
685	16.641	22.928	5	7.23E+00	0.00E+00	7.23E+00	6.14E+01	0.00E+00	2.70E-01	7.50E+00	4	
687	16.440	22.920	4	3.49E+00	0.00E+00	3.49E+00	9.74E+01	0.00E+00	4.29E-01	3.92E+00	3	
688	16.390	22.926	5	3.26E+00	0.00E+00	3.26E+00	4.44E+01	0.00E+00	1.95E-01	3.46E+00	3	
742	16.695	22.940	1	2.09E+01	0.00E+00	2.09E+01	4.89E+01	0.00E+00	2.15E-01	2.11E+01	5	

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Sarin (GB) 250kg Bomb

Moderate Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 12 rounds at aimpoint (18.10, 20.10)											
147	18.748	18.163	7	1.81E-02	0.00E+00	1.81E-02	1.81E-02	0.00E+00	7.96E-05	1.82E-02	1
282	17.696	17.960	2	8.06E-01	0.00E+00	8.06E-01	8.06E-01	0.00E+00	3.55E-03	8.10E-01	2
284	17.741	17.997	2	2.45E+00	0.00E+00	2.45E+00	2.45E+00	0.00E+00	1.08E-02	2.46E+00	2
285	17.693	18.039	2	7.62E-01	0.00E+00	7.62E-01	7.62E-01	0.00E+00	3.35E-03	7.65E-01	2
426	17.792	17.981	3	5.40E+00	0.00E+00	5.40E+00	5.40E+00	0.00E+00	2.38E-02	5.42E+00	3
524	18.297	18.033	2	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5
525	18.296	17.953	2	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
526	18.347	17.998	2	2.58E+01	0.00E+00	2.58E+01	2.58E+01	0.00E+00	1.14E-01	2.59E+01	5
658	18.138	17.962	7	2.74E+01	0.00E+00	2.74E+01	2.74E+01	0.00E+00	1.21E-01	2.75E+01	5
675	18.397	17.990	3	2.25E+01	0.00E+00	2.25E+01	2.25E+01	0.00E+00	9.90E-02	2.26E+01	5
734	18.172	18.053	4	2.92E+01	0.00E+00	2.92E+01	2.92E+01	0.00E+00	1.28E-01	2.93E+01	5
761	17.998	18.471	4	3.56E+01	0.00E+00	3.56E+01	3.56E+01	0.00E+00	1.57E-01	3.58E+01	6
767	17.905	18.470	4	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.86E-02	2.25E+01	5
804	18.624	18.999	3	1.33E+00	0.00E+00	1.33E+00	1.33E+00	0.00E+00	5.85E-03	1.34E+00	2
823	17.948	18.476	2	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.29E-01	2.94E+01	5
852	17.775	18.473	40	4.70E+00	0.00E+00	4.70E+00	4.70E+00	0.00E+00	2.07E-02	4.72E+00	3
854	17.942	18.391	2	2.60E+01	0.00E+00	2.60E+01	2.60E+01	0.00E+00	1.14E-01	2.61E+01	5
855	17.799	18.399	5	6.49E+00	0.00E+00	6.49E+00	6.49E+00	0.00E+00	2.86E-02	6.52E+00	4
858	18.573	19.060	12	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.05E-02	6.96E+00	4
912	18.695	16.902	2	7.56E-02	0.00E+00	7.56E-02	7.56E-02	0.00E+00	3.33E-04	7.59E-02	1
914	18.004	17.005	3	9.54E+00	0.00E+00	9.54E+00	9.54E+00	0.00E+00	4.20E-02	9.58E+00	4
915	17.953	16.928	3	7.30E+00	0.00E+00	7.30E+00	7.30E+00	0.00E+00	3.21E-02	7.33E+00	4
916	18.006	16.927	3	8.82E+00	0.00E+00	8.82E+00	8.82E+00	0.00E+00	3.88E-02	8.86E+00	4
917	18.056	16.923	3	9.84E+00	0.00E+00	9.84E+00	9.84E+00	0.00E+00	4.33E-02	9.88E+00	4
918	18.099	16.922	4	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
919	17.894	16.929	2	5.14E+00	0.00E+00	5.14E+00	5.14E+00	0.00E+00	2.26E-02	5.16E+00	3
934	17.893	16.999	2	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.52E-02	5.75E+00	3
935	18.196	17.004	3	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
936	17.843	17.001	2	3.87E+00	0.00E+00	3.87E+00	3.87E+00	0.00E+00	1.70E-02	3.89E+00	3
950	18.521	16.997	12	4.79E+00	0.00E+00	4.79E+00	4.79E+00	0.00E+00	2.11E-02	4.81E+00	3
952	18.150	17.000	3	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
953	18.055	17.000	3	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
954	18.098	16.998	3	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
955	18.498	16.900	4	5.07E+00	0.00E+00	5.07E+00	5.07E+00	0.00E+00	2.23E-02	5.09E+00	3
956	17.792	17.000	2	2.13E+00	0.00E+00	2.13E+00	2.13E+00	0.00E+00	9.37E-03	2.14E+00	2
957	17.746	16.997	2	7.34E-01	0.00E+00	7.34E-01	7.34E-01	0.00E+00	3.23E-03	7.37E-01	2
959	18.643	16.902	9	8.84E-01	0.00E+00	8.84E-01	8.84E-01	0.00E+00	3.89E-03	8.88E-01	2
960	18.452	16.901	4	6.84E+00	0.00E+00	6.84E+00	6.84E+00	0.00E+00	3.01E-02	6.87E+00	4
961	18.400	16.901	1	8.20E+00	0.00E+00	8.20E+00	8.20E+00	0.00E+00	3.61E-02	8.24E+00	4
962	18.350	16.901	1	9.87E+00	0.00E+00	9.87E+00	9.87E+00	0.00E+00	4.34E-02	9.91E+00	4
963	18.299	16.903	1	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
964	18.250	16.903	1	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
965	18.196	16.903	1	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
966	18.145	16.907	1	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
967	17.841	16.917	1	3.21E+00	0.00E+00	3.21E+00	3.21E+00	0.00E+00	1.41E-02	3.22E+00	3
984	18.538	16.909	2	3.74E+00	0.00E+00	3.74E+00	3.74E+00	0.00E+00	1.65E-02	3.76E+00	3
985	18.587	16.905	2	2.11E+00	0.00E+00	2.11E+00	2.11E+00	0.00E+00	9.28E-03	2.12E+00	2
997	17.947	17.000	2	7.70E+00	0.00E+00	7.70E+00	7.70E+00	0.00E+00	3.39E-02	7.73E+00	4
Case 2: Protected 12 rounds at aimpoint (20.45, 33.25)											
67	20.501	33.135	1	9.77E+01	0.00E+00	9.77E+01	1.72E+02	0.00E+00	7.57E-01	9.85E+01	8
68	20.561	33.131	1	6.96E+01	0.00E+00	6.96E+01	1.46E+02	0.00E+00	6.42E-01	7.02E+01	7
69	20.605	33.207	2	1.10E+01	0.00E+00	1.10E+01	1.82E+01	0.00E+00	8.01E-02	1.11E+01	4
115	20.711	33.203	2	2.42E+01	0.00E+00	2.42E+01	3.96E+01	0.00E+00	1.74E-01	2.44E+01	5
117	20.256	33.206	3	9.37E+01	0.00E+00	9.37E+01	1.54E+02	0.00E+00	6.78E-01	9.44E+01	8
118	20.349	33.200	3	1.07E+02	0.00E+00	1.07E+02	1.74E+02	0.00E+00	7.66E-01	1.08E+02	8
119	20.658	33.204	2	9.09E+01	0.00E+00	9.09E+01	1.49E+02	0.00E+00	6.56E-01	9.16E+01	8
121	20.757	33.205	2	9.32E+01	0.00E+00	9.32E+01	1.53E+02	0.00E+00	6.73E-01	9.39E+01	8
134	20.300	33.198	4	4.43E+00	0.00E+00	4.43E+00	7.69E+00	0.00E+00	3.38E-02	4.46E+00	3
136	20.211	33.205	4	2.35E+01	0.00E+00	2.35E+01	3.86E+01	0.00E+00	1.70E-01	2.37E+01	5
165	20.395	33.192	4	2.38E+01	0.00E+00	2.38E+01	4.15E+01	0.00E+00	1.83E-01	2.40E+01	5
168	20.555	33.205	2	9.67E+01	0.00E+00	9.67E+01	1.59E+02	0.00E+00	7.00E-01	9.74E+01	8
172	20.494	33.196	4	1.98E+01	0.00E+00	1.98E+01	3.35E+01	0.00E+00	1.47E-01	1.99E+01	5

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

176	20.850	33.193	1	3.56E-02	0.00E+00	3.56E-02	7.01E-02	0.00E+00	3.08E-04	3.59E-02	1
178	20.801	33.194	1	9.79E+00	0.00E+00	9.79E+00	1.89E+01	0.00E+00	8.32E-02	9.87E+00	4
179	20.448	33.195	4	1.03E+02	0.00E+00	1.03E+02	1.69E+02	0.00E+00	7.44E-01	1.04E+02	8
180	20.316	33.264	16	1.95E+01	0.00E+00	1.95E+01	3.67E+01	0.00E+00	1.61E-01	1.97E+01	5
182	20.725	33.278	16	2.25E+01	0.00E+00	2.25E+01	3.91E+01	0.00E+00	1.72E-01	2.27E+01	5
183	20.524	33.279	16	1.89E+01	0.00E+00	1.89E+01	3.41E+01	0.00E+00	1.50E-01	1.91E+01	5

Sarin (GB) 250kg Bomb
Heavy Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 24 rounds at aimpoint (18.75, 20.25)											
38	18.902	18.161	2	5.97E+01	0.00E+00	5.97E+01	5.97E+01	0.00E+00	2.63E-01	6.00E+01	7
40	18.900	18.232	2	6.28E+01	0.00E+00	6.28E+01	6.28E+01	0.00E+00	2.76E-01	6.31E+01	7
42	18.948	18.195	2	5.91E+01	0.00E+00	5.91E+01	5.91E+01	0.00E+00	2.60E-01	5.94E+01	7
147	18.748	18.163	7	5.85E+01	0.00E+00	5.85E+01	5.85E+01	0.00E+00	2.57E-01	5.88E+01	7
154	18.999	18.190	3	5.49E+01	0.00E+00	5.49E+01	5.49E+01	0.00E+00	2.42E-01	5.51E+01	7
220	18.777	18.253	4	6.38E+01	0.00E+00	6.38E+01	6.38E+01	0.00E+00	2.81E-01	6.41E+01	7
524	18.297	18.033	2	8.58E-01	0.00E+00	8.58E-01	8.58E-01	0.00E+00	3.78E-03	8.62E-01	2
525	18.296	17.953	2	7.98E-01	0.00E+00	7.98E-01	7.98E-01	0.00E+00	3.51E-03	8.02E-01	2
526	18.347	17.998	2	2.90E+00	0.00E+00	2.90E+00	2.90E+00	0.00E+00	1.28E-02	2.91E+00	2
675	18.397	17.990	3	6.67E+00	0.00E+00	6.67E+00	6.67E+00	0.00E+00	2.93E-02	6.70E+00	4
770	18.800	19.002	2	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8
771	18.674	18.999	7	1.05E+02	0.00E+00	1.05E+02	1.05E+02	0.00E+00	4.62E-01	1.05E+02	8
772	18.736	18.998	8	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8
773	18.870	19.061	6	1.15E+02	0.00E+00	1.15E+02	1.15E+02	0.00E+00	5.06E-01	1.16E+02	8
775	18.651	19.059	8	1.11E+02	0.00E+00	1.11E+02	1.11E+02	0.00E+00	4.88E-01	1.11E+02	8
777	18.950	19.002	4	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8
778	18.793	15.558	1	8.64E+00	0.00E+00	8.64E+00	8.64E+00	0.00E+00	3.80E-02	8.68E+00	4
780	18.842	15.405	3	6.40E+00	0.00E+00	6.40E+00	6.40E+00	0.00E+00	2.82E-02	6.43E+00	4
782	18.636	15.483	5	5.99E+00	0.00E+00	5.99E+00	5.99E+00	0.00E+00	2.64E-02	6.02E+00	4
783	18.794	15.483	6	7.56E+00	0.00E+00	7.56E+00	7.56E+00	0.00E+00	3.33E-02	7.59E+00	4
784	18.591	15.481	2	4.93E+00	0.00E+00	4.93E+00	4.93E+00	0.00E+00	2.17E-02	4.95E+00	3
785	18.685	15.488	5	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
786	18.543	15.483	4	3.78E+00	0.00E+00	3.78E+00	3.78E+00	0.00E+00	1.66E-02	3.80E+00	3
787	18.902	15.479	2	7.51E+00	0.00E+00	7.51E+00	7.51E+00	0.00E+00	3.30E-02	7.54E+00	4
788	18.949	15.474	3	7.44E+00	0.00E+00	7.44E+00	7.44E+00	0.00E+00	3.27E-02	7.47E+00	4
789	18.949	15.405	6	6.42E+00	0.00E+00	6.42E+00	6.42E+00	0.00E+00	2.82E-02	6.45E+00	4
790	18.844	15.477	2	7.42E+00	0.00E+00	7.42E+00	7.42E+00	0.00E+00	3.26E-02	7.45E+00	4
791	18.996	15.472	3	6.95E+00	0.00E+00	6.95E+00	6.95E+00	0.00E+00	3.06E-02	6.98E+00	4
792	18.997	15.406	5	6.11E+00	0.00E+00	6.11E+00	6.11E+00	0.00E+00	2.69E-02	6.14E+00	4
793	18.439	15.487	3	1.30E+00	0.00E+00	1.30E+00	1.30E+00	0.00E+00	5.72E-03	1.31E+00	2
794	18.489	15.483	3	2.28E+00	0.00E+00	2.28E+00	2.28E+00	0.00E+00	1.00E-02	2.29E+00	2
795	18.739	15.483	5	7.44E+00	0.00E+00	7.44E+00	7.44E+00	0.00E+00	3.27E-02	7.47E+00	4
798	18.846	15.549	4	8.50E+00	0.00E+00	8.50E+00	8.50E+00	0.00E+00	3.74E-02	8.54E+00	4
799	18.400	15.488	4	4.22E-01	0.00E+00	4.22E-01	4.22E-01	0.00E+00	1.86E-03	4.24E-01	2
804	18.624	18.999	3	9.46E+01	0.00E+00	9.46E+01	9.46E+01	0.00E+00	4.16E-01	9.50E+01	8
805	18.490	15.405	3	1.90E+00	0.00E+00	1.90E+00	1.90E+00	0.00E+00	8.36E-03	1.91E+00	2
814	18.952	19.064	6	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8
815	18.545	15.420	4	3.37E+00	0.00E+00	3.37E+00	3.37E+00	0.00E+00	1.48E-02	3.38E+00	3
816	18.738	15.415	5	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.84E-02	6.49E+00	4
831	18.999	19.004	5	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
832	18.739	19.068	4	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8
858	18.573	19.060	12	7.63E+01	0.00E+00	7.63E+01	7.63E+01	0.00E+00	3.36E-01	7.66E+01	8
859	18.800	19.065	3	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8
860	18.868	18.997	4	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8
861	18.943	15.543	6	8.41E+00	0.00E+00	8.41E+00	8.41E+00	0.00E+00	3.70E-02	8.45E+00	4
862	18.900	15.398	2	6.26E+00	0.00E+00	6.26E+00	6.26E+00	0.00E+00	2.75E-02	6.29E+00	4
865	18.790	15.396	2	6.24E+00	0.00E+00	6.24E+00	6.24E+00	0.00E+00	2.75E-02	6.27E+00	4
870	18.683	15.404	4	5.83E+00	0.00E+00	5.83E+00	5.83E+00	0.00E+00	2.57E-02	5.86E+00	3
873	18.898	15.544	4	8.43E+00	0.00E+00	8.43E+00	8.43E+00	0.00E+00	3.71E-02	8.47E+00	4
887	18.486	15.329	3	1.47E+00	0.00E+00	1.47E+00	1.47E+00	0.00E+00	6.47E-03	1.48E+00	2
889	18.997	15.547	2	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
890	18.440	15.406	2	1.01E+00	0.00E+00	1.01E+00	1.01E+00	0.00E+00	4.44E-03	1.01E+00	2
904	19.152	16.827	6	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
906	19.286	16.899	3	5.33E+00	0.00E+00	5.33E+00	5.33E+00	0.00E+00	2.35E-02	5.35E+00	3
907	19.194	16.828	6	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

908	19.152	16.901	2	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
909	18.885	16.902	2	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
910	19.239	16.901	3	8.20E+00	0.00E+00	8.20E+00	8.20E+00	0.00E+00	3.61E-02	8.24E+00	4
912	18.695	16.902	2	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
927	18.594	15.407	4	4.36E+00	0.00E+00	4.36E+00	4.36E+00	0.00E+00	1.92E-02	4.38E+00	3
933	18.637	15.415	4	5.30E+00	0.00E+00	5.30E+00	5.30E+00	0.00E+00	2.33E-02	5.32E+00	3
943	19.301	16.815	16	4.25E+00	0.00E+00	4.25E+00	4.25E+00	0.00E+00	1.87E-02	4.27E+00	3
949	18.996	16.900	2	2.51E+01	0.00E+00	2.51E+01	2.51E+01	0.00E+00	1.10E-01	2.52E+01	5
950	18.521	16.997	12	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
951	18.949	16.902	2	2.74E+01	0.00E+00	2.74E+01	2.74E+01	0.00E+00	1.21E-01	2.75E+01	5
955	18.498	16.900	4	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
959	18.643	16.902	9	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5
960	18.452	16.901	4	8.45E+00	0.00E+00	8.45E+00	8.45E+00	0.00E+00	3.72E-02	8.49E+00	4
961	18.400	16.901	1	5.16E+00	0.00E+00	5.16E+00	5.16E+00	0.00E+00	2.27E-02	5.18E+00	3
962	18.350	16.901	1	2.79E+00	0.00E+00	2.79E+00	2.79E+00	0.00E+00	1.23E-02	2.80E+00	2
963	18.299	16.903	1	9.82E-01	0.00E+00	9.82E-01	9.82E-01	0.00E+00	4.32E-03	9.86E-01	2
976	19.263	16.995	6	7.09E+00	0.00E+00	7.09E+00	7.09E+00	0.00E+00	3.12E-02	7.12E+00	4
978	19.336	16.911	2	2.94E+00	0.00E+00	2.94E+00	2.94E+00	0.00E+00	1.29E-02	2.95E+00	2
980	19.390	16.905	2	1.07E+00	0.00E+00	1.07E+00	1.07E+00	0.00E+00	4.71E-03	1.07E+00	2
981	18.972	16.996	6	2.78E+01	0.00E+00	2.78E+01	2.78E+01	0.00E+00	1.22E-01	2.79E+01	5
984	18.538	16.909	2	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
985	18.587	16.905	2	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
992	18.792	16.910	6	2.92E+01	0.00E+00	2.92E+01	2.92E+01	0.00E+00	1.28E-01	2.93E+01	5
993	19.192	16.912	3	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
994	19.043	16.912	8	2.25E+01	0.00E+00	2.25E+01	2.25E+01	0.00E+00	9.90E-02	2.26E+01	5
996	19.096	16.911	7	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5

Case 2: Protected 24 rounds at aimpoint (20.45, 33.25)

67	20.501	33.135	1	9.46E+01	0.00E+00	9.46E+01	1.41E+02	0.00E+00	6.20E-01	9.52E+01	8
68	20.561	33.131	1	7.86E+01	0.00E+00	7.86E+01	1.46E+02	0.00E+00	6.42E-01	7.92E+01	8
69	20.605	33.207	2	1.11E+01	0.00E+00	1.11E+01	1.68E+01	0.00E+00	7.39E-02	1.12E+01	4
115	20.711	33.203	2	2.45E+01	0.00E+00	2.45E+01	3.71E+01	0.00E+00	1.63E-01	2.47E+01	5
117	20.256	33.206	3	9.38E+01	0.00E+00	9.38E+01	1.42E+02	0.00E+00	6.25E-01	9.44E+01	8
118	20.349	33.200	3	1.09E+02	0.00E+00	1.09E+02	1.64E+02	0.00E+00	7.22E-01	1.10E+02	8
119	20.658	33.204	2	9.20E+01	0.00E+00	9.20E+01	1.39E+02	0.00E+00	6.12E-01	9.26E+01	8
121	20.757	33.205	2	9.42E+01	0.00E+00	9.42E+01	1.42E+02	0.00E+00	6.25E-01	9.48E+01	8
134	20.300	33.198	4	4.21E+00	0.00E+00	4.21E+00	6.03E+00	0.00E+00	2.65E-02	4.24E+00	3
136	20.211	33.205	4	2.36E+01	0.00E+00	2.36E+01	3.57E+01	0.00E+00	1.57E-01	2.38E+01	5
165	20.395	33.192	4	2.30E+01	0.00E+00	2.30E+01	3.48E+01	0.00E+00	1.53E-01	2.32E+01	5
168	20.555	33.205	2	9.78E+01	0.00E+00	9.78E+01	1.48E+02	0.00E+00	6.51E-01	9.85E+01	8
172	20.494	33.196	4	1.96E+01	0.00E+00	1.96E+01	2.96E+01	0.00E+00	1.30E-01	1.97E+01	5
176	20.850	33.193	1	3.30E-02	0.00E+00	3.30E-02	5.16E-02	0.00E+00	2.27E-04	3.32E-02	1
178	20.801	33.194	1	9.07E+00	0.00E+00	9.07E+00	1.40E+01	0.00E+00	6.16E-02	9.13E+00	4
179	20.448	33.195	4	1.05E+02	0.00E+00	1.05E+02	1.61E+02	0.00E+00	7.08E-01	1.06E+02	8
180	20.316	33.264	16	1.81E+01	0.00E+00	1.81E+01	2.76E+01	0.00E+00	1.21E-01	1.82E+01	5
182	20.725	33.278	16	2.12E+01	0.00E+00	2.12E+01	3.02E+01	0.00E+00	1.33E-01	2.13E+01	5
183	20.524	33.279	16	1.76E+01	0.00E+00	1.76E+01	2.59E+01	0.00E+00	1.14E-01	1.77E+01	5

Sarin (GB) 250kg TBM
Light Attack
Height of Release: 0m

Height of Release: 0m											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				1 round at aimpoint (17.55, 20.30)							
282	17.696	17.960	2	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
284	17.741	17.997	2	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
285	17.693	18.039	2	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
403	17.533	17.964	7	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
426	17.792	17.981	3	6.85E+00	0.00E+00	6.85E+00	6.85E+00	0.00E+00	3.01E-02	6.88E+00	4
479	17.571	18.054	4	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
848	17.619	14.598	28	5.75E+00	0.00E+00	5.75E+00	5.75E+00	0.00E+00	2.53E-02	5.78E+00	3
850	17.645	14.519	5	1.31E+00	0.00E+00	1.31E+00	1.31E+00	0.00E+00	5.76E-03	1.32E+00	2
852	17.775	18.473	40	9.63E+00	0.00E+00	9.63E+00	9.63E+00	0.00E+00	4.24E-02	9.67E+00	4
855	17.799	18.399	5	6.70E+00	0.00E+00	6.70E+00	6.70E+00	0.00E+00	2.95E-02	6.73E+00	4
868	17.645	14.717	10	1.52E+00	0.00E+00	1.52E+00	1.52E+00	0.00E+00	6.69E-03	1.53E+00	2
886	17.630	18.485	1	5.23E+01	0.00E+00	5.23E+01	5.23E+01	0.00E+00	2.30E-01	5.25E+01	7
911	17.490	16.998	2	4.35E+00	0.00E+00	4.35E+00	4.35E+00	0.00E+00	1.91E-02	4.37E+00	3
913	17.539	17.001	2	5.44E+00	0.00E+00	5.44E+00	5.44E+00	0.00E+00	2.39E-02	5.46E+00	3
936	17.843	17.001	2	1.63E-01	0.00E+00	1.63E-01	1.63E-01	0.00E+00	7.17E-04	1.64E-01	1

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

956	17.792	17.000	2	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.38E-02	3.15E+00	3
957	17.746	16.997	2	4.87E+00	0.00E+00	4.87E+00	4.87E+00	0.00E+00	2.14E-02	4.89E+00	3
958	17.696	16.997	2	5.68E+00	0.00E+00	5.68E+00	5.68E+00	0.00E+00	2.50E-02	5.70E+00	3
967	17.841	16.917	1	3.53E-02	0.00E+00	3.53E-02	3.53E-02	0.00E+00	1.55E-04	3.55E-02	1
986	17.597	17.004	1	7.01E+00	0.00E+00	7.01E+00	7.01E+00	0.00E+00	3.08E-02	7.04E+00	4
988	17.649	17.006	2	7.50E+00	0.00E+00	7.50E+00	7.50E+00	0.00E+00	3.30E-02	7.53E+00	4

Case 2: Protected 1 round at aimpoint (10.55, 35.15)

273	10.598	35.125	2	2.27E+01	0.00E+00	2.27E+01	2.28E+01	0.00E+00	1.00E-01	2.28E+01	5
491	10.597	35.018	14	2.46E+01	0.00E+00	2.46E+01	1.56E+02	0.00E+00	6.86E-01	2.53E+01	5

Sarin (GB) 500kg TBM
Moderate Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (17.80, 20.10)											
282	17.696	17.960	2	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
284	17.741	17.997	2	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
285	17.693	18.039	2	2.36E+01	0.00E+00	2.36E+01	2.36E+01	0.00E+00	1.04E-01	2.37E+01	5
403	17.533	17.964	7	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
426	17.792	17.981	3	1.71E+01	0.00E+00	1.71E+01	1.71E+01	0.00E+00	7.52E-02	1.72E+01	5
479	17.571	18.054	4	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
524	18.297	18.033	2	4.25E+01	0.00E+00	4.25E+01	4.25E+01	0.00E+00	1.87E-01	4.27E+01	6
525	18.296	17.953	2	3.72E+01	0.00E+00	3.72E+01	3.72E+01	0.00E+00	1.64E-01	3.74E+01	6
526	18.347	17.998	2	3.43E+01	0.00E+00	3.43E+01	3.43E+01	0.00E+00	1.51E-01	3.45E+01	6
658	18.138	17.962	7	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
675	18.397	17.990	3	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
734	18.172	18.053	4	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5
761	17.998	18.471	4	5.70E-01	0.00E+00	5.70E-01	5.70E-01	0.00E+00	2.51E-03	5.73E-01	2
767	17.905	18.470	4	6.81E+00	0.00E+00	6.81E+00	6.81E+00	0.00E+00	3.00E-02	6.84E+00	4
768	18.003	14.798	7	3.38E+00	0.00E+00	3.38E+00	3.38E+00	0.00E+00	1.49E-02	3.39E+00	3
774	17.506	14.808	6	3.71E+00	0.00E+00	3.71E+00	3.71E+00	0.00E+00	1.63E-02	3.73E+00	3
776	17.999	14.606	4	2.56E+00	0.00E+00	2.56E+00	2.56E+00	0.00E+00	1.13E-02	2.57E+00	2
782	18.636	15.483	5	2.25E+00	0.00E+00	2.25E+00	2.25E+00	0.00E+00	9.90E-03	2.26E+00	2
784	18.591	15.481	2	3.28E+00	0.00E+00	3.28E+00	3.28E+00	0.00E+00	1.44E-02	3.29E+00	3
785	18.685	15.488	5	5.85E-01	0.00E+00	5.85E-01	5.85E-01	0.00E+00	2.57E-03	5.88E-01	2
786	18.543	15.483	4	4.43E+00	0.00E+00	4.43E+00	4.43E+00	0.00E+00	1.95E-02	4.45E+00	3
793	18.439	15.487	3	6.34E+00	0.00E+00	6.34E+00	6.34E+00	0.00E+00	2.79E-02	6.37E+00	4
794	18.489	15.483	3	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
799	18.400	15.488	4	6.75E+00	0.00E+00	6.75E+00	6.75E+00	0.00E+00	2.97E-02	6.78E+00	4
805	18.490	15.405	3	5.32E+00	0.00E+00	5.32E+00	5.32E+00	0.00E+00	2.34E-02	5.34E+00	3
815	18.545	15.420	4	4.31E+00	0.00E+00	4.31E+00	4.31E+00	0.00E+00	1.90E-02	4.33E+00	3
823	17.948	18.476	2	3.38E+00	0.00E+00	3.38E+00	3.38E+00	0.00E+00	1.49E-02	3.39E+00	3
846	17.548	14.720	33	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3
847	17.452	14.713	7	3.07E+00	0.00E+00	3.07E+00	3.07E+00	0.00E+00	1.35E-02	3.08E+00	3
848	17.619	14.598	28	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3
849	17.847	14.523	14	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.43E-02	3.26E+00	3
850	17.645	14.519	5	4.00E+00	0.00E+00	4.00E+00	4.00E+00	0.00E+00	1.76E-02	4.02E+00	3
851	17.522	14.526	16	3.44E+00	0.00E+00	3.44E+00	3.44E+00	0.00E+00	1.51E-02	3.46E+00	3
852	17.775	18.473	40	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5
854	17.942	18.391	2	4.08E+00	0.00E+00	4.08E+00	4.08E+00	0.00E+00	1.80E-02	4.10E+00	3
855	17.799	18.399	5	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
856	17.750	14.796	9	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.06E-02	4.71E+00	3
864	17.794	14.710	24	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.87E-02	4.28E+00	3
868	17.645	14.717	10	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.01E-02	4.58E+00	3
870	18.683	15.404	4	6.11E-01	0.00E+00	6.11E-01	6.11E-01	0.00E+00	2.69E-03	6.14E-01	2
872	17.453	14.800	1	3.04E+00	0.00E+00	3.04E+00	3.04E+00	0.00E+00	1.34E-02	3.05E+00	3
883	17.944	14.715	6	3.16E+00	0.00E+00	3.16E+00	3.16E+00	0.00E+00	1.39E-02	3.17E+00	3
885	17.712	14.726	1	4.57E+00	0.00E+00	4.57E+00	4.57E+00	0.00E+00	2.01E-02	4.59E+00	3
886	17.630	18.485	1	4.26E+01	0.00E+00	4.26E+01	4.26E+01	0.00E+00	1.87E-01	4.28E+01	6
887	18.486	15.329	3	5.27E+00	0.00E+00	5.27E+00	5.27E+00	0.00E+00	2.32E-02	5.29E+00	3
890	18.440	15.406	2	6.15E+00	0.00E+00	6.15E+00	6.15E+00	0.00E+00	2.71E-02	6.18E+00	4
911	17.490	16.998	2	8.29E+00	0.00E+00	8.29E+00	8.29E+00	0.00E+00	3.65E-02	8.33E+00	4
912	18.695	16.902	2	2.26E-01	0.00E+00	2.26E-01	2.26E-01	0.00E+00	9.94E-04	2.27E-01	1
913	17.539	17.001	2	9.92E+00	0.00E+00	9.92E+00	9.92E+00	0.00E+00	4.36E-02	9.96E+00	4
914	18.004	17.005	3	7.58E+00	0.00E+00	7.58E+00	7.58E+00	0.00E+00	3.34E-02	7.61E+00	4
915	17.953	16.928	3	7.69E+00	0.00E+00	7.69E+00	7.69E+00	0.00E+00	3.38E-02	7.72E+00	4
916	18.006	16.927	3	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.41E-02	7.77E+00	4

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

917	18.056	16.923	3	7.90E+00	0.00E+00	7.90E+00	7.90E+00	0.00E+00	3.48E-02	7.93E+00	4
918	18.099	16.922	4	8.61E+00	0.00E+00	8.61E+00	8.61E+00	0.00E+00	3.79E-02	8.65E+00	4
919	17.894	16.929	2	7.31E+00	0.00E+00	7.31E+00	7.31E+00	0.00E+00	3.22E-02	7.34E+00	4
927	18.594	15.407	4	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.38E-02	3.15E+00	3
933	18.637	15.415	4	2.13E+00	0.00E+00	2.13E+00	2.13E+00	0.00E+00	9.37E-03	2.14E+00	2
934	17.893	16.999	2	7.40E+00	0.00E+00	7.40E+00	7.40E+00	0.00E+00	3.26E-02	7.43E+00	4
935	18.196	17.004	3	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
936	17.843	17.001	2	9.00E+00	0.00E+00	9.00E+00	9.00E+00	0.00E+00	3.96E-02	9.04E+00	4
950	18.521	16.997	12	7.59E+00	0.00E+00	7.59E+00	7.59E+00	0.00E+00	3.34E-02	7.62E+00	4
952	18.150	17.000	3	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
953	18.055	17.000	3	8.09E+00	0.00E+00	8.09E+00	8.09E+00	0.00E+00	3.56E-02	8.13E+00	4
954	18.098	16.998	3	8.71E+00	0.00E+00	8.71E+00	8.71E+00	0.00E+00	3.83E-02	8.75E+00	4
955	18.498	16.900	4	8.55E+00	0.00E+00	8.55E+00	8.55E+00	0.00E+00	3.76E-02	8.59E+00	4
956	17.792	17.000	2	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
957	17.746	16.997	2	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
958	17.696	16.997	2	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
959	18.643	16.902	9	2.55E+00	0.00E+00	2.55E+00	2.55E+00	0.00E+00	1.12E-02	2.56E+00	2
960	18.452	16.901	4	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
961	18.400	16.901	1	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
962	18.350	16.901	1	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.12E-02	1.40E+01	4
963	18.299	16.903	1	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
964	18.250	16.903	1	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
965	18.196	16.903	1	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
966	18.145	16.907	1	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
967	17.841	16.917	1	8.87E+00	0.00E+00	8.87E+00	8.87E+00	0.00E+00	3.90E-02	8.91E+00	4
984	18.538	16.909	2	6.58E+00	0.00E+00	6.58E+00	6.58E+00	0.00E+00	2.90E-02	6.61E+00	4
985	18.587	16.905	2	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
986	17.597	17.004	1	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
988	17.649	17.006	2	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.46E-02	1.25E+01	4
997	17.947	17.000	2	7.51E+00	0.00E+00	7.51E+00	7.51E+00	0.00E+00	3.30E-02	7.54E+00	4

Case 2: Protected 2 rounds at aimpoint (20.75, 44.55)

5	21.072	42.916	4	0.00E+00	0.00E+00	0.00E+00	7.35E-01	0.00E+00	3.23E-03	3.23E-03	1
19	21.406	43.011	4	0.00E+00	0.00E+00	0.00E+00	4.05E+00	0.00E+00	1.78E-02	1.78E-02	1
20	21.498	43.009	4	0.00E+00	0.00E+00	0.00E+00	1.20E-01	0.00E+00	5.28E-04	5.28E-04	1
90	21.104	43.007	4	0.00E+00	0.00E+00	0.00E+00	5.65E+00	0.00E+00	2.49E-02	2.49E-02	1
91	21.004	43.009	9	0.00E+00	0.00E+00	0.00E+00	2.38E-01	0.00E+00	1.05E-03	1.05E-03	1
92	21.192	43.013	9	0.00E+00	0.00E+00	0.00E+00	2.98E+01	0.00E+00	1.31E-01	1.31E-01	1
123	21.204	44.156	8	0.00E+00	0.00E+00	0.00E+00	3.41E+02	0.00E+00	1.50E+00	1.50E+00	2
124	21.203	44.253	8	2.79E+01	0.00E+00	2.79E+01	0.00E+00	1.23E-01	0.00E+00	2.79E+01	5
125	21.299	44.254	8	1.24E+01	0.00E+00	1.24E+01	0.00E+00	5.46E-02	0.00E+00	1.24E+01	4
129	21.297	44.160	8	0.00E+00	0.00E+00	0.00E+00	2.59E+02	0.00E+00	1.14E+00	1.14E+00	2
210	21.403	42.836	4	0.00E+00	0.00E+00	0.00E+00	1.51E-01	0.00E+00	6.64E-04	6.64E-04	1
218	20.797	44.206	4	0.00E+00	0.00E+00	0.00E+00	8.02E-02	0.00E+00	3.53E-04	3.53E-04	1

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 4 rounds at aimpoint (17.95, 21.45)

38	18.902	18.161	2	6.29E-01	0.00E+00	6.29E-01	6.29E-01	0.00E+00	2.77E-03	6.32E-01	2
40	18.900	18.232	2	6.33E-01	0.00E+00	6.33E-01	6.33E-01	0.00E+00	2.79E-03	6.36E-01	2
42	18.948	18.195	2	2.58E-02	0.00E+00	2.58E-02	2.58E-02	0.00E+00	1.14E-04	2.59E-02	1
147	18.748	18.163	7	5.65E+00	0.00E+00	5.65E+00	5.65E+00	0.00E+00	2.49E-02	5.67E+00	3
220	18.777	18.253	4	4.19E+00	0.00E+00	4.19E+00	4.19E+00	0.00E+00	1.84E-02	4.21E+00	3
282	17.696	17.960	2	7.13E+00	0.00E+00	7.13E+00	7.13E+00	0.00E+00	3.14E-02	7.16E+00	4
284	17.741	17.997	2	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
285	17.693	18.039	2	7.30E+00	0.00E+00	7.30E+00	7.30E+00	0.00E+00	3.21E-02	7.33E+00	4
403	17.533	17.964	7	3.82E+00	0.00E+00	3.82E+00	3.82E+00	0.00E+00	1.68E-02	3.84E+00	3
426	17.792	17.981	3	8.98E+00	0.00E+00	8.98E+00	8.98E+00	0.00E+00	3.95E-02	9.02E+00	4
479	17.571	18.054	4	4.70E+00	0.00E+00	4.70E+00	4.70E+00	0.00E+00	2.07E-02	4.72E+00	3
524	18.297	18.033	2	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.29E-01	2.94E+01	5
525	18.296	17.953	2	2.84E+01	0.00E+00	2.84E+01	2.84E+01	0.00E+00	1.25E-01	2.85E+01	5
526	18.347	17.998	2	2.85E+01	0.00E+00	2.85E+01	2.85E+01	0.00E+00	1.25E-01	2.86E+01	5
658	18.138	17.962	7	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.03E-01	2.35E+01	5
675	18.397	17.990	3	2.74E+01	0.00E+00	2.74E+01	2.74E+01	0.00E+00	1.21E-01	2.75E+01	5
734	18.172	18.053	4	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
761	17.998	18.471	4	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

767	17.905	18.470	4	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
768	18.003	14.798	7	7.05E+00	0.00E+00	7.05E+00	7.05E+00	0.00E+00	3.10E-02	7.08E+00	4
770	18.800	19.002	2	1.32E+00	0.00E+00	1.32E+00	1.32E+00	0.00E+00	5.81E-03	1.33E+00	2
771	18.674	18.999	7	9.34E+00	0.00E+00	9.34E+00	9.34E+00	0.00E+00	4.11E-02	9.38E+00	4
772	18.736	18.998	8	4.47E+00	0.00E+00	4.47E+00	4.47E+00	0.00E+00	1.97E-02	4.49E+00	3
773	18.870	19.061	6	1.66E-01	0.00E+00	1.66E-01	1.66E-01	0.00E+00	7.30E-04	1.67E-01	1
774	17.506	14.808	6	1.57E+00	0.00E+00	1.57E+00	1.57E+00	0.00E+00	6.91E-03	1.58E+00	2
775	18.651	19.059	8	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
776	17.999	14.606	4	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.83E-02	6.47E+00	4
778	18.793	15.558	1	3.12E+00	0.00E+00	3.12E+00	3.12E+00	0.00E+00	1.37E-02	3.13E+00	3
780	18.842	15.405	3	1.85E+00	0.00E+00	1.85E+00	1.85E+00	0.00E+00	8.14E-03	1.86E+00	2
782	18.636	15.483	5	7.29E+00	0.00E+00	7.29E+00	7.29E+00	0.00E+00	3.21E-02	7.32E+00	4
783	18.794	15.483	6	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.35E-02	3.07E+00	3
784	18.591	15.481	2	8.38E+00	0.00E+00	8.38E+00	8.38E+00	0.00E+00	3.69E-02	8.42E+00	4
785	18.685	15.488	5	6.04E+00	0.00E+00	6.04E+00	6.04E+00	0.00E+00	2.66E-02	6.07E+00	4
786	18.543	15.483	4	9.48E+00	0.00E+00	9.48E+00	9.48E+00	0.00E+00	4.17E-02	9.52E+00	4
787	18.902	15.479	2	9.13E-01	0.00E+00	9.13E-01	9.13E-01	0.00E+00	4.02E-03	9.17E-01	2
788	18.949	15.474	3	1.90E-02	0.00E+00	1.90E-02	1.90E-02	0.00E+00	8.36E-05	1.91E-02	1
789	18.949	15.405	6	1.82E-02	0.00E+00	1.82E-02	1.82E-02	0.00E+00	8.01E-05	1.83E-02	1
790	18.844	15.477	2	1.89E+00	0.00E+00	1.89E+00	1.89E+00	0.00E+00	8.32E-03	1.90E+00	2
793	18.439	15.487	3	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
794	18.489	15.483	3	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
795	18.739	15.483	5	4.16E+00	0.00E+00	4.16E+00	4.16E+00	0.00E+00	1.83E-02	4.18E+00	3
798	18.846	15.549	4	1.91E+00	0.00E+00	1.91E+00	1.91E+00	0.00E+00	8.40E-03	1.92E+00	2
799	18.400	15.488	4	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
804	18.624	18.999	3	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
805	18.490	15.405	3	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
815	18.545	15.420	4	9.26E+00	0.00E+00	9.26E+00	9.26E+00	0.00E+00	4.07E-02	9.30E+00	4
816	18.738	15.415	5	4.14E+00	0.00E+00	4.14E+00	4.14E+00	0.00E+00	1.82E-02	4.16E+00	3
823	17.948	18.476	2	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
832	18.739	19.068	4	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
846	17.548	14.720	33	1.81E+00	0.00E+00	1.81E+00	1.81E+00	0.00E+00	7.96E-03	1.82E+00	2
847	17.452	14.713	7	1.03E+00	0.00E+00	1.03E+00	1.03E+00	0.00E+00	4.53E-03	1.03E+00	2
848	17.619	14.598	28	2.09E+00	0.00E+00	2.09E+00	2.09E+00	0.00E+00	9.20E-03	2.10E+00	2
849	17.847	14.523	14	3.86E+00	0.00E+00	3.86E+00	3.86E+00	0.00E+00	1.70E-02	3.88E+00	3
850	17.645	14.519	5	2.13E+00	0.00E+00	2.13E+00	2.13E+00	0.00E+00	9.37E-03	2.14E+00	2
851	17.522	14.526	16	1.48E+00	0.00E+00	1.48E+00	1.48E+00	0.00E+00	6.51E-03	1.49E+00	2
852	17.775	18.473	40	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
854	17.942	18.391	2	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.12E-02	1.40E+01	4
855	17.799	18.399	5	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
856	17.750	14.796	9	3.12E+00	0.00E+00	3.12E+00	3.12E+00	0.00E+00	1.37E-02	3.13E+00	3
858	18.573	19.060	12	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5
859	18.800	19.065	3	1.24E+00	0.00E+00	1.24E+00	1.24E+00	0.00E+00	5.46E-03	1.25E+00	2
860	18.868	18.997	4	2.55E-01	0.00E+00	2.55E-01	2.55E-01	0.00E+00	1.12E-03	2.56E-01	2
861	18.943	15.543	6	1.34E-01	0.00E+00	1.34E-01	1.34E-01	0.00E+00	5.90E-04	1.35E-01	1
862	18.900	15.398	2	9.03E-01	0.00E+00	9.03E-01	9.03E-01	0.00E+00	3.97E-03	9.07E-01	2
864	17.794	14.710	24	3.59E+00	0.00E+00	3.59E+00	3.59E+00	0.00E+00	1.58E-02	3.61E+00	3
865	18.790	15.396	2	3.07E+00	0.00E+00	3.07E+00	3.07E+00	0.00E+00	1.35E-02	3.08E+00	3
868	17.645	14.717	10	2.25E+00	0.00E+00	2.25E+00	2.25E+00	0.00E+00	9.90E-03	2.26E+00	2
870	18.683	15.404	4	5.94E+00	0.00E+00	5.94E+00	5.94E+00	0.00E+00	2.61E-02	5.97E+00	3
872	17.453	14.800	1	1.12E+00	0.00E+00	1.12E+00	1.12E+00	0.00E+00	4.93E-03	1.12E+00	2
873	18.898	15.544	4	9.94E-01	0.00E+00	9.94E-01	9.94E-01	0.00E+00	4.37E-03	9.98E-01	2
879	17.501	20.109	2	9.75E-02	0.00E+00	9.75E-02	9.75E-02	0.00E+00	4.29E-04	9.79E-02	1
883	17.944	14.715	6	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
885	17.712	14.726	1	2.62E+00	0.00E+00	2.62E+00	2.62E+00	0.00E+00	1.15E-02	2.63E+00	2
886	17.630	18.485	1	6.82E+00	0.00E+00	6.82E+00	6.82E+00	0.00E+00	3.00E-02	6.85E+00	4
887	18.486	15.329	3	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
890	18.440	15.406	2	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
909	18.885	16.902	2	1.67E+00	0.00E+00	1.67E+00	1.67E+00	0.00E+00	7.35E-03	1.68E+00	2
911	17.490	16.998	2	2.60E+00	0.00E+00	2.60E+00	2.60E+00	0.00E+00	1.14E-02	2.61E+00	2
912	18.695	16.902	2	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
913	17.539	17.001	2	3.32E+00	0.00E+00	3.32E+00	3.32E+00	0.00E+00	1.46E-02	3.33E+00	3
914	18.004	17.005	3	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
915	17.953	16.928	3	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
916	18.006	16.927	3	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
917	18.056	16.923	3	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
918	18.099	16.922	4	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.08E-02	1.62E+01	5
919	17.894	16.929	2	9.29E+00	0.00E+00	9.29E+00	9.29E+00	0.00E+00	4.09E-02	9.33E+00	4
927	18.594	15.407	4	8.14E+00	0.00E+00	8.14E+00	8.14E+00	0.00E+00	3.58E-02	8.18E+00	4
933	18.637	15.415	4	7.11E+00	0.00E+00	7.11E+00	7.11E+00	0.00E+00	3.13E-02	7.14E+00	4
934	17.893	16.999	2	9.41E+00	0.00E+00	9.41E+00	9.41E+00	0.00E+00	4.14E-02	9.45E+00	4
935	18.196	17.004	3	1.90E+01	0.00E+00	1.90E+01	1.90E+01	0.00E+00	8.36E-02	1.91E+01	5

Table A3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

936	17.843	17.001	2	7.91E+00	0.00E+00	7.91E+00	7.91E+00	0.00E+00	3.48E-02	7.94E+00	4
949	18.996	16.900	2	3.58E-02	0.00E+00	3.58E-02	3.58E-02	0.00E+00	1.58E-04	3.60E-02	1
950	18.521	16.997	12	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.69E-02	1.53E+01	5
951	18.949	16.902	2	4.63E-01	0.00E+00	4.63E-01	4.63E-01	0.00E+00	2.04E-03	4.65E-01	2
952	18.150	17.000	3	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
953	18.055	17.000	3	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
954	18.098	16.998	3	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5
955	18.498	16.900	4	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
956	17.792	17.000	2	7.10E+00	0.00E+00	7.10E+00	7.10E+00	0.00E+00	3.12E-02	7.13E+00	4
957	17.746	16.997	2	6.12E+00	0.00E+00	6.12E+00	6.12E+00	0.00E+00	2.69E-02	6.15E+00	4
958	17.696	16.997	2	5.15E+00	0.00E+00	5.15E+00	5.15E+00	0.00E+00	2.27E-02	5.17E+00	3
959	18.643	16.902	9	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
960	18.452	16.901	4	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
961	18.400	16.901	1	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
962	18.350	16.901	1	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
963	18.299	16.903	1	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.40E-02	1.92E+01	5
964	18.250	16.903	1	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.40E-02	1.92E+01	5
965	18.196	16.903	1	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5
966	18.145	16.907	1	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.66E-02	1.75E+01	5
967	17.841	16.917	1	7.80E+00	0.00E+00	7.80E+00	7.80E+00	0.00E+00	3.43E-02	7.83E+00	4
981	18.972	16.996	6	2.49E-01	0.00E+00	2.49E-01	2.49E-01	0.00E+00	1.10E-03	2.50E-01	2
984	18.538	16.909	2	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
985	18.587	16.905	2	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
986	17.597	17.004	1	3.99E+00	0.00E+00	3.99E+00	3.99E+00	0.00E+00	1.76E-02	4.01E+00	3
988	17.649	17.006	2	4.64E+00	0.00E+00	4.64E+00	4.64E+00	0.00E+00	2.04E-02	4.66E+00	3
992	18.792	16.910	6	4.10E+00	0.00E+00	4.10E+00	4.10E+00	0.00E+00	1.80E-02	4.12E+00	3
997	17.947	17.000	2	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
Case 2: Protected 4 rounds at aimpoint (20.45, 33.00)											
117	20.256	33.206	3	7.74E-01	0.00E+00	7.74E-01	7.74E-01	0.00E+00	3.41E-03	7.77E-01	2
118	20.349	33.200	3	4.21E+01	0.00E+00	4.21E+01	4.21E+01	0.00E+00	1.85E-01	4.23E+01	6
134	20.300	33.198	4	6.71E+00	0.00E+00	6.71E+00	9.89E+00	0.00E+00	4.35E-02	6.75E+00	4
165	20.395	33.192	4	3.94E+00	0.00E+00	3.94E+00	6.95E+00	0.00E+00	3.06E-02	3.97E+00	3
180	20.316	33.264	16	7.23E+00	0.00E+00	7.23E+00	7.23E+00	0.00E+00	3.18E-02	7.26E+00	4

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

VX 152mm Artillery
Light Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				18 rounds at aimpoint (18.70, 20.30)								
147	18.748	18.163	7	1.54E-03	0.00E+00	2.16E-03	1.54E-03	0.00E+00	2.16E-03	4.31E-03	1	
220	18.777	18.253	4	3.81E-03	0.00E+00	5.33E-03	3.81E-03	0.00E+00	5.33E-03	1.07E-02	1	
770	18.800	19.002	2	2.05E-01	1.66E+00	2.87E-01	2.05E-01	1.66E+00	1.19E+01	1.22E+01	4	
771	18.674	18.999	7	2.63E-01	2.04E+00	3.68E-01	2.63E-01	2.04E+00	1.46E+01	1.50E+01	5	
772	18.736	18.998	8	3.08E-01	2.45E+00	4.31E-01	3.08E-01	2.45E+00	1.76E+01	1.80E+01	5	
773	18.870	19.061	6	5.24E-02	6.06E-01	7.34E-02	5.24E-02	6.06E-01	4.32E+00	4.39E+00	3	
775	18.651	19.059	8	2.46E-01	2.16E+00	3.44E-01	2.46E-01	2.16E+00	1.55E+01	1.58E+01	5	
804	18.624	18.999	3	1.34E-01	1.08E+00	1.88E-01	1.34E-01	1.08E+00	7.75E+00	7.94E+00	4	
832	18.739	19.068	4	3.72E-01	3.41E+00	5.21E-01	3.72E-01	3.41E+00	2.44E+01	2.49E+01	5	
858	18.573	19.060	12	4.41E-02	4.76E-01	6.17E-02	4.41E-02	4.76E-01	3.39E+00	3.46E+00	3	
859	18.800	19.065	3	2.45E-01	2.20E+00	3.43E-01	2.45E-01	2.20E+00	1.57E+01	1.61E+01	5	
860	18.868	18.997	4	5.21E-02	4.79E-01	7.29E-02	5.21E-02	4.79E-01	3.43E+00	3.50E+00	3	
Case 2: Protected				18 rounds at aimpoint (18.70, 20.30)								
770	18.800	19.002	2	0.00E+00	0.00E+00	0.00E+00	1.34E-05	1.54E+00	1.08E+01	1.08E+01	4	
771	18.674	18.999	7	0.00E+00	0.00E+00	0.00E+00	3.62E-04	1.90E+00	1.33E+01	1.33E+01	4	
772	18.736	18.998	8	0.00E+00	0.00E+00	0.00E+00	3.85E-04	2.28E+00	1.60E+01	1.60E+01	5	
773	18.870	19.061	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-01	3.95E+00	3.95E+00	3	
775	18.651	19.059	8	0.00E+00	0.00E+00	0.00E+00	3.39E-04	2.01E+00	1.41E+01	1.41E+01	4	
804	18.624	18.999	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+00	7.00E+00	7.00E+00	4	
832	18.739	19.068	4	0.00E+00	0.00E+00	0.00E+00	4.82E-04	3.17E+00	2.22E+01	2.22E+01	5	
858	18.573	19.060	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-01	3.10E+00	3.10E+00	3	
859	18.800	19.065	3	0.00E+00	0.00E+00	0.00E+00	3.35E-04	2.05E+00	1.44E+01	1.44E+01	4	
860	18.868	18.997	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-01	3.12E+00	3.12E+00	3	

VX MRLS
Moderate Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected 240 rounds at aimpoint (20.60, 34.70)											
67	20.501	33.135	1	1.72E+00	1.61E+00	2.41E+00	1.72E+00	1.61E+00	1.37E+01	1.61E+01	5
68	20.561	33.131	1	1.87E+00	1.84E+00	2.62E+00	1.87E+00	1.84E+00	1.55E+01	1.81E+01	5
69	20.605	33.207	2	2.05E+00	2.68E+00	2.87E+00	2.05E+00	2.68E+00	2.16E+01	2.45E+01	5
115	20.711	33.203	2	1.70E+00	1.82E+00	2.38E+00	1.70E+00	1.82E+00	1.51E+01	1.75E+01	5
119	20.658	33.204	2	1.79E+00	1.10E+00	2.51E+00	1.79E+00	1.10E+00	1.02E+01	1.27E+01	4
121	20.757	33.205	2	1.77E+00	2.03E+00	2.48E+00	1.77E+00	2.03E+00	1.67E+01	1.92E+01	5
123	21.204	44.156	8	0.00E+00	2.12E+00	0.00E+00	0.00E+00	2.12E+00	1.48E+01	1.48E+01	4
165	20.395	33.192	4	1.26E+00	0.00E+00	1.76E+00	1.26E+00	0.00E+00	1.76E+00	3.53E+00	3
168	20.555	33.205	2	2.08E+00	0.00E+00	2.91E+00	2.08E+00	0.00E+00	2.91E+00	5.82E+00	3
169	15.798	19.207	6	0.00E+00	1.31E+00	0.00E+00	0.00E+00	1.31E+00	9.17E+00	9.17E+00	4
172	20.494	33.196	4	1.85E+00	2.70E+00	2.59E+00	1.85E+00	2.70E+00	2.15E+01	2.41E+01	5
176	20.850	33.193	1	1.43E+00	0.00E+00	2.00E+00	1.43E+00	0.00E+00	2.00E+00	4.00E+00	3
178	20.801	33.194	1	1.76E+00	0.00E+00	2.46E+00	1.76E+00	0.00E+00	2.46E+00	4.93E+00	3
179	20.448	33.195	4	1.58E+00	2.17E+00	2.21E+00	1.58E+00	2.17E+00	1.74E+01	1.96E+01	5
182	20.725	33.278	16	1.94E+00	0.00E+00	2.72E+00	1.94E+00	0.00E+00	2.72E+00	5.43E+00	3
183	20.524	33.279	16	2.26E+00	1.49E+00	3.16E+00	2.26E+00	1.49E+00	1.36E+01	1.68E+01	5
185	22.192	32.987	2	0.00E+00	1.99E+00	0.00E+00	0.00E+00	1.99E+00	1.39E+01	1.39E+01	4
186	22.297	33.067	3	0.00E+00	1.68E+00	0.00E+00	0.00E+00	1.68E+00	1.18E+01	1.18E+01	4
187	23.897	43.795	2	0.00E+00	2.85E+00	0.00E+00	0.00E+00	2.85E+00	2.00E+01	2.00E+01	5
188	20.537	36.176	2	0.00E+00	3.66E+00	0.00E+00	0.00E+00	3.66E+00	2.56E+01	2.56E+01	5
Case 2: Protected 240 rounds at aimpoint (20.60, 34.70)											
67	20.501	33.135	1	0.00E+00	0.00E+00	0.00E+00	1.36E+00	1.32E+00	1.11E+01	1.11E+01	4
68	20.561	33.131	1	0.00E+00	0.00E+00	0.00E+00	1.45E+00	1.57E+00	1.30E+01	1.30E+01	4
69	20.605	33.207	2	0.00E+00	0.00E+00	0.00E+00	1.58E+00	2.35E+00	1.87E+01	1.87E+01	5
115	20.711	33.203	2	0.00E+00	0.00E+00	0.00E+00	1.36E+00	1.56E+00	1.28E+01	1.28E+01	4
117	20.256	33.206	3	0.00E+00	0.00E+00	0.00E+00	1.42E+00	1.75E+00	1.42E+01	1.42E+01	4
118	20.349	33.200	3	0.00E+00	0.00E+00	0.00E+00	1.40E+00	0.00E+00	1.96E+00	1.96E+00	2
119	20.658	33.204	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E+00	1.28E+01	1.28E+01	4
159	21.592	38.674	2	0.00E+00	0.00E+00	0.00E+00	1.01E+00	0.00E+00	1.41E+00	1.41E+00	2
162	20.899	36.202	4	0.00E+00	0.00E+00	0.00E+00	1.60E+00	1.08E+00	9.80E+00	9.80E+00	4

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

165	20.395	33.192	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E+00	1.67E+01	1.67E+01	5
166	15.652	19.204	2	0.00E+00	0.00E+00	0.00E+00	1.44E+00	0.00E+00	2.02E+00	2.02E+00	2
168	20.555	33.205	2	0.00E+00	0.00E+00	0.00E+00	1.14E+00	0.00E+00	1.60E+00	1.60E+00	2
169	15.798	19.207	6	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.86E+00	1.50E+01	1.50E+01	4
170	15.906	19.394	1	0.00E+00	0.00E+00	0.00E+00	1.25E+00	0.00E+00	1.75E+00	1.75E+00	2
171	15.958	19.392	1	0.00E+00	0.00E+00	0.00E+00	1.47E+00	1.21E+00	1.05E+01	1.05E+01	4
172	20.494	33.196	4	0.00E+00	0.00E+00	0.00E+00	1.66E+00	0.00E+00	2.32E+00	2.32E+00	2
173	15.850	19.199	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E+00	1.16E+01	1.16E+01	4
174	20.901	33.191	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E+00	9.87E+00	9.87E+00	4
175	20.950	33.190	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E+00	1.78E+01	1.78E+01	5
176	20.850	33.193	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E+00	2.28E+01	2.28E+01	5

VX MRLS
Heavy Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				720 rounds at aimpoint (20.45, 35.30)								
67	20.501	33.135	1	3.24E+00	2.02E+00	4.54E+00	3.24E+00	2.02E+00	1.87E+01	2.32E+01	5	
68	20.561	33.131	1	3.04E+00	1.72E+00	4.26E+00	3.04E+00	1.72E+00	1.63E+01	2.06E+01	5	
69	20.605	33.207	2	3.03E+00	2.17E+00	4.24E+00	3.03E+00	2.17E+00	1.94E+01	2.37E+01	5	
115	20.711	33.203	2	2.70E+00	1.81E+00	3.78E+00	2.70E+00	1.81E+00	1.65E+01	2.02E+01	5	
116	20.063	33.201	3	2.11E+00	1.02E+00	2.95E+00	2.11E+00	1.02E+00	1.01E+01	1.30E+01	4	
117	20.256	33.206	3	3.16E+00	2.25E+00	4.42E+00	3.16E+00	2.25E+00	2.02E+01	2.46E+01	5	
118	20.349	33.200	3	2.96E+00	1.99E+00	4.14E+00	2.96E+00	1.99E+00	1.81E+01	2.22E+01	5	
119	20.658	33.204	2	2.78E+00	1.92E+00	3.89E+00	2.78E+00	1.92E+00	1.73E+01	2.12E+01	5	
120	20.161	33.203	3	2.84E+00	1.86E+00	3.98E+00	2.84E+00	1.86E+00	1.70E+01	2.10E+01	5	
121	20.757	33.205	2	2.72E+00	1.82E+00	3.81E+00	2.72E+00	1.82E+00	1.65E+01	2.04E+01	5	
133	20.115	33.201	4	2.47E+00	1.40E+00	3.46E+00	2.47E+00	1.40E+00	1.33E+01	1.67E+01	5	
134	20.300	33.198	4	3.03E+00	2.19E+00	4.24E+00	3.03E+00	2.19E+00	1.96E+01	2.38E+01	5	
135	20.012	33.206	4	1.82E+00	9.15E-01	2.55E+00	1.82E+00	9.15E-01	8.95E+00	1.15E+01	4	
136	20.211	33.205	4	3.10E+00	2.12E+00	4.34E+00	3.10E+00	2.12E+00	1.92E+01	2.35E+01	5	
165	20.395	33.192	4	3.22E+00	2.57E+00	4.51E+00	3.22E+00	2.57E+00	2.25E+01	2.70E+01	5	
168	20.555	33.205	2	3.33E+00	2.63E+00	4.66E+00	3.33E+00	2.63E+00	2.31E+01	2.77E+01	5	
172	20.494	33.196	4	3.47E+00	2.78E+00	4.86E+00	3.47E+00	2.78E+00	2.43E+01	2.92E+01	5	
174	20.901	33.191	1	1.75E+00	6.86E-01	2.45E+00	1.75E+00	6.86E-01	7.25E+00	9.70E+00	4	
175	20.950	33.190	1	1.20E+00	4.21E-01	1.68E+00	1.20E+00	4.21E-01	4.63E+00	6.31E+00	4	
176	20.850	33.193	1	2.34E+00	1.38E+00	3.28E+00	2.34E+00	1.38E+00	1.29E+01	1.62E+01	5	
177	20.993	33.189	1	7.44E-01	1.86E-01	1.04E+00	7.44E-01	1.86E-01	2.34E+00	3.39E+00	3	
178	20.801	33.194	1	2.60E+00	1.52E+00	3.64E+00	2.60E+00	1.52E+00	1.43E+01	1.79E+01	5	
179	20.448	33.195	4	3.49E+00	3.00E+00	4.89E+00	3.49E+00	3.00E+00	2.59E+01	3.08E+01	6	
180	20.316	33.264	16	3.20E+00	2.91E+00	4.48E+00	3.20E+00	2.91E+00	2.49E+01	2.93E+01	5	
181	20.923	33.281	16	1.63E+00	1.01E+00	2.28E+00	1.63E+00	1.01E+00	9.35E+00	1.16E+01	4	
182	20.725	33.278	16	2.90E+00	2.58E+00	4.06E+00	2.90E+00	2.58E+00	2.21E+01	2.62E+01	5	
183	20.524	33.279	16	3.69E+00	3.87E+00	5.17E+00	3.69E+00	3.87E+00	3.23E+01	3.74E+01	6	
Case 2: Protected				720 rounds at aimpoint (20.45, 35.00)								
67	20.501	33.135	1	0.00E+00	0.00E+00	0.00E+00	5.56E-01	1.18E+00	9.04E+00	9.04E+00	4	
68	20.561	33.131	1	0.00E+00	0.00E+00	0.00E+00	4.49E-01	2.96E-01	2.70E+00	2.70E+00	2	
69	20.605	33.207	2	0.00E+00	0.00E+00	0.00E+00	4.94E-01	6.95E-01	5.56E+00	5.56E+00	3	
115	20.711	33.203	2	0.00E+00	0.00E+00	0.00E+00	6.21E-01	1.95E+00	1.45E+01	1.45E+01	4	
116	20.063	33.201	3	0.00E+00	0.00E+00	0.00E+00	4.63E-01	9.76E-01	7.48E+00	7.48E+00	4	
117	20.256	33.206	3	0.00E+00	0.00E+00	0.00E+00	5.38E-01	1.78E+00	1.32E+01	1.32E+01	4	
118	20.349	33.200	3	0.00E+00	0.00E+00	0.00E+00	6.01E-01	1.15E+00	8.89E+00	8.89E+00	4	
119	20.658	33.204	2	0.00E+00	0.00E+00	0.00E+00	4.85E-01	1.18E+00	8.94E+00	8.94E+00	4	
120	20.161	33.203	3	0.00E+00	0.00E+00	0.00E+00	5.18E-01	4.62E-01	3.96E+00	3.96E+00	3	
121	20.757	33.205	2	0.00E+00	0.00E+00	0.00E+00	6.64E-01	1.91E+00	1.43E+01	1.43E+01	4	
133	20.115	33.201	4	0.00E+00	0.00E+00	0.00E+00	5.04E-01	4.78E-01	4.05E+00	4.05E+00	3	
134	20.300	33.198	4	0.00E+00	0.00E+00	0.00E+00	5.87E-01	2.59E+00	1.90E+01	1.90E+01	5	
135	20.012	33.206	4	0.00E+00	0.00E+00	0.00E+00	3.45E-01	7.54E-01	5.76E+00	5.76E+00	3	
136	20.211	33.205	4	0.00E+00	0.00E+00	0.00E+00	5.42E-01	1.34E+00	1.01E+01	1.01E+01	4	
165	20.395	33.192	4	0.00E+00	0.00E+00	0.00E+00	8.61E-01	2.71E+00	2.02E+01	2.02E+01	5	
168	20.555	33.205	2	0.00E+00	0.00E+00	0.00E+00	5.48E-01	5.15E-01	4.37E+00	4.37E+00	3	
172	20.494	33.196	4	0.00E+00	0.00E+00	0.00E+00	6.58E-01	1.69E+00	1.28E+01	1.28E+01	4	
174	20.901	33.191	1	0.00E+00	0.00E+00	0.00E+00	4.34E-01	3.92E-01	3.35E+00	3.35E+00	3	
175	20.950	33.190	1	0.00E+00	0.00E+00	0.00E+00	3.54E-01	1.97E-01	1.87E+00	1.87E+00	2	
176	20.850	33.193	1	0.00E+00	0.00E+00	0.00E+00	4.96E-01	7.23E-01	5.76E+00	5.76E+00	3	
177	20.993	33.189	1	0.00E+00	0.00E+00	0.00E+00	2.06E-01	2.73E-02	4.80E-01	4.80E-01	2	
178	20.801	33.194	1	0.00E+00	0.00E+00	0.00E+00	5.75E-01	1.45E+00	1.10E+01	1.10E+01	4	
179	20.448	33.195	4	0.00E+00	0.00E+00	0.00E+00	7.48E-01	2.20E+00	1.64E+01	1.64E+01	5	

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

180	20.316	33.264	16	0.00E+00	0.00E+00	0.00E+00	7.22E-01	3.27E+00	2.39E+01	2.39E+01	5
181	20.923	33.281	16	0.00E+00	0.00E+00	0.00E+00	5.08E-01	9.20E-01	7.15E+00	7.15E+00	4
182	20.725	33.278	16	0.00E+00	0.00E+00	0.00E+00	7.81E-01	3.36E+00	2.46E+01	2.46E+01	5
183	20.524	33.279	16	0.00E+00	0.00E+00	0.00E+00	7.78E-01	2.03E+00	1.53E+01	1.53E+01	5

VX 250kg Bomb
Light Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category	
Case 1: Unprotected				2 rounds at aimpoint (17.95, 20.60)								
284	17.741	17.997	2	2.29E-02	3.57E-01	3.21E-02	2.29E-02	3.57E-01	2.53E+00	2.56E+00	2	
426	17.792	17.981	3	1.30E-01	1.66E+00	1.82E-01	1.30E-01	1.66E+00	1.18E+01	1.20E+01	4	
658	18.138	17.962	7	1.73E-01	2.22E+00	2.42E-01	1.73E-01	2.22E+00	1.58E+01	1.60E+01	5	
734	18.172	18.053	4	1.00E-01	1.26E+00	1.40E-01	1.00E-01	1.26E+00	8.96E+00	9.10E+00	4	
761	17.998	18.471	4	1.64E-02	3.03E-01	2.30E-02	1.64E-02	3.03E-01	2.14E+00	2.17E+00	2	
767	17.905	18.470	4	2.54E-01	3.61E+00	3.56E-01	2.54E-01	3.61E+00	2.56E+01	2.60E+01	5	
823	17.948	18.476	2	2.43E-02	4.30E-01	3.40E-02	2.43E-02	4.30E-01	3.04E+00	3.08E+00	3	
852	17.775	18.473	40	9.84E-02	1.49E+00	1.38E-01	9.84E-02	1.49E+00	1.06E+01	1.07E+01	4	
854	17.942	18.391	2	4.42E-02	7.34E-01	6.19E-02	4.42E-02	7.34E-01	5.20E+00	5.26E+00	3	
855	17.799	18.399	5	2.63E-01	3.63E+00	3.68E-01	2.63E-01	3.63E+00	2.58E+01	2.61E+01	5	
914	18.004	17.005	3	2.10E-02	2.43E-01	2.94E-02	2.10E-02	2.43E-01	1.73E+00	1.76E+00	2	
915	17.953	16.928	3	1.14E-02	1.95E-01	1.60E-02	1.14E-02	1.95E-01	1.38E+00	1.40E+00	2	
916	18.006	16.927	3	1.56E-02	2.21E-01	2.18E-02	1.56E-02	2.21E-01	1.57E+00	1.59E+00	2	
917	18.056	16.923	3	3.31E-02	4.21E-01	4.63E-02	3.31E-02	4.21E-01	2.99E+00	3.04E+00	3	
918	18.099	16.922	4	4.66E-02	5.13E-01	6.52E-02	4.66E-02	5.13E-01	3.66E+00	3.72E+00	3	
919	17.894	16.929	2	3.36E-02	4.26E-01	4.70E-02	3.36E-02	4.26E-01	3.03E+00	3.08E+00	3	
934	17.893	16.999	2	4.06E-02	4.82E-01	5.68E-02	4.06E-02	4.82E-01	3.43E+00	3.49E+00	3	
935	18.196	17.004	3	2.07E-02	2.32E-01	2.90E-02	2.07E-02	2.32E-01	1.65E+00	1.68E+00	2	
936	17.843	17.001	2	5.36E-02	5.87E-01	7.50E-02	5.36E-02	5.87E-01	4.18E+00	4.26E+00	3	
952	18.150	17.000	3	3.57E-02	4.50E-01	5.00E-02	3.57E-02	4.50E-01	3.20E+00	3.25E+00	3	
953	18.055	17.000	3	3.93E-02	4.73E-01	5.50E-02	3.93E-02	4.73E-01	3.37E+00	3.42E+00	3	
954	18.098	16.998	3	5.34E-02	5.91E-01	7.48E-02	5.34E-02	5.91E-01	4.21E+00	4.29E+00	3	
956	17.792	17.000	2	3.57E-02	4.16E-01	5.00E-02	3.57E-02	4.16E-01	2.96E+00	3.01E+00	3	
957	17.746	16.997	2	1.47E-02	1.91E-01	2.06E-02	1.47E-02	1.91E-01	1.36E+00	1.38E+00	2	
965	18.196	16.903	1	1.20E-02	1.97E-01	1.68E-02	1.20E-02	1.97E-01	1.40E+00	1.41E+00	2	
966	18.145	16.907	1	3.09E-02	4.05E-01	4.33E-02	3.09E-02	4.05E-01	2.88E+00	2.92E+00	2	
967	17.841	16.917	1	4.61E-02	5.00E-01	6.45E-02	4.61E-02	5.00E-01	3.56E+00	3.63E+00	3	
997	17.947	17.000	2	1.99E-02	2.37E-01	2.79E-02	1.99E-02	2.37E-01	1.69E+00	1.71E+00	2	
Case 2: Protected				2 rounds at aimpoint (17.95, 20.60)								
284	17.741	17.997	2	0.00E+00	1.02E-01	0.00E+00	0.00E+00	3.39E-01	2.37E+00	2.37E+00	2	
426	17.792	17.981	3	0.00E+00	4.81E-01	0.00E+00	0.00E+00	1.58E+00	1.11E+01	1.11E+01	4	
658	18.138	17.962	7	0.00E+00	6.57E-01	0.00E+00	0.00E+00	2.11E+00	1.48E+01	1.48E+01	4	
734	18.172	18.053	4	0.00E+00	3.90E-01	0.00E+00	0.00E+00	1.20E+00	8.40E+00	8.40E+00	4	
761	17.998	18.471	4	0.00E+00	9.89E-02	0.00E+00	0.00E+00	2.89E-01	2.02E+00	2.02E+00	2	
767	17.905	18.470	4	0.00E+00	1.18E+00	0.00E+00	0.00E+00	3.44E+00	2.41E+01	2.41E+01	5	
823	17.948	18.476	2	0.00E+00	1.40E-01	0.00E+00	0.00E+00	4.10E-01	2.87E+00	2.87E+00	2	
852	17.775	18.473	40	0.00E+00	4.83E-01	0.00E+00	0.00E+00	1.42E+00	9.94E+00	9.94E+00	4	
854	17.942	18.391	2	0.00E+00	2.36E-01	0.00E+00	0.00E+00	6.99E-01	4.89E+00	4.89E+00	3	
855	17.799	18.399	5	0.00E+00	1.18E+00	0.00E+00	0.00E+00	3.45E+00	2.42E+01	2.42E+01	5	
914	18.004	17.005	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-01	1.58E+00	1.58E+00	2	
915	17.953	16.928	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-01	1.27E+00	1.27E+00	2	
916	18.006	16.927	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-01	1.44E+00	1.44E+00	2	
917	18.056	16.923	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-01	2.74E+00	2.74E+00	2	
918	18.099	16.922	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-01	3.34E+00	3.34E+00	3	
919	17.894	16.929	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-01	2.77E+00	2.77E+00	2	
934	17.893	16.999	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-01	3.14E+00	3.14E+00	3	
935	18.196	17.004	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-01	1.51E+00	1.51E+00	2	
936	17.843	17.001	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-01	3.82E+00	3.82E+00	3	
952	18.150	17.000	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-01	2.93E+00	2.93E+00	2	
953	18.055	17.000	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-01	3.08E+00	3.08E+00	3	
954	18.098	16.998	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.49E-01	3.84E+00	3.84E+00	3	
956	17.792	17.000	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-01	2.71E+00	2.71E+00	2	
957	17.746	16.997	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-01	1.25E+00	1.25E+00	2	
964	18.250	16.903	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-06	1.06E-05	1.06E-05	1	
965	18.196	16.903	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-01	1.29E+00	1.29E+00	2	
966	18.145	16.907	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-01	2.64E+00	2.64E+00	2	
967	17.841	16.917	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-01	3.26E+00	3.26E+00	3	
997	17.947	17.000	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-01	1.54E+00	1.54E+00	2	

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	
Case 1: Unprotected 12 rounds at aimpoint (18.75, 20.30)											
38	18.902	18.161	2	2.07E+00	2.07E+01	2.90E+00	2.07E+00	2.07E+01	1.48E+02	1.51E+02	8
40	18.900	18.232	2	2.21E+00	2.38E+01	3.09E+00	2.21E+00	2.38E+01	1.70E+02	1.73E+02	8
42	18.948	18.195	2	2.02E+00	2.06E+01	2.83E+00	2.02E+00	2.06E+01	1.47E+02	1.50E+02	8
147	18.748	18.163	7	1.98E+00	1.96E+01	2.77E+00	1.98E+00	1.96E+01	1.40E+02	1.43E+02	8
154	18.999	18.190	3	2.13E+00	2.19E+01	2.98E+00	2.13E+00	2.19E+01	1.56E+02	1.59E+02	8
220	18.777	18.253	4	2.22E+00	2.40E+01	3.11E+00	2.22E+00	2.40E+01	1.71E+02	1.74E+02	8
675	18.397	17.990	3	8.68E-06	0.00E+00	1.22E-05	8.68E-06	0.00E+00	1.22E-05	2.43E-05	1
770	18.800	19.002	2	8.66E+00	1.81E+02	1.21E+01	8.66E+00	1.81E+02	1.28E+03	1.29E+03	8
771	18.674	18.999	7	7.47E+00	1.51E+02	1.05E+01	7.47E+00	1.51E+02	1.07E+03	1.08E+03	8
772	18.736	18.998	8	6.99E+00	1.39E+02	9.79E+00	6.99E+00	1.39E+02	9.83E+02	9.93E+02	8
773	18.870	19.061	6	8.39E+00	1.75E+02	1.17E+01	8.39E+00	1.75E+02	1.24E+03	1.25E+03	8
775	18.651	19.059	8	7.46E+00	1.51E+02	1.04E+01	7.46E+00	1.51E+02	1.07E+03	1.08E+03	8
777	18.950	19.002	4	6.47E+00	1.26E+02	9.06E+00	6.47E+00	1.26E+02	8.91E+02	9.00E+02	8
778	18.793	15.558	1	1.31E-01	4.75E-01	1.83E-01	1.31E-01	4.75E-01	3.51E+00	3.69E+00	3
780	18.842	15.405	3	8.51E-02	4.66E-01	1.19E-01	8.51E-02	4.66E-01	3.38E+00	3.50E+00	3
782	18.636	15.483	5	9.31E-02	4.59E-01	1.30E-01	9.31E-02	4.59E-01	3.34E+00	3.47E+00	3
783	18.794	15.483	6	1.09E-01	4.70E-01	1.53E-01	1.09E-01	4.70E-01	3.44E+00	3.60E+00	3
784	18.591	15.481	2	9.42E-02	3.81E-01	1.32E-01	9.42E-02	3.81E-01	2.80E+00	2.93E+00	2
785	18.685	15.488	5	1.13E-01	4.83E-01	1.58E-01	1.13E-01	4.83E-01	3.54E+00	3.70E+00	3
786	18.543	15.483	4	4.96E-02	2.96E-01	6.94E-02	4.96E-02	2.96E-01	2.14E+00	2.21E+00	2
787	18.902	15.479	2	1.11E-01	4.76E-01	1.55E-01	1.11E-01	4.76E-01	3.49E+00	3.64E+00	3
788	18.949	15.474	3	9.91E-02	5.04E-01	1.39E-01	9.91E-02	5.04E-01	3.67E+00	3.81E+00	3
789	18.949	15.405	6	8.83E-02	4.77E-01	1.24E-01	8.83E-02	4.77E-01	3.46E+00	3.59E+00	3
790	18.844	15.477	2	9.26E-02	4.93E-01	1.30E-01	9.26E-02	4.93E-01	3.58E+00	3.71E+00	3
791	18.996	15.472	3	1.09E-01	4.59E-01	1.53E-01	1.09E-01	4.59E-01	3.37E+00	3.52E+00	3
792	18.997	15.406	5	9.86E-02	4.49E-01	1.38E-01	9.86E-02	4.49E-01	3.28E+00	3.42E+00	3
793	18.439	15.487	3	4.66E-06	7.44E-02	6.52E-06	4.66E-06	7.44E-02	5.21E-01	5.21E-01	2
794	18.489	15.483	3	1.39E-02	1.73E-01	1.95E-02	1.39E-02	1.73E-01	1.23E+00	1.25E+00	2
795	18.739	15.483	5	9.62E-02	4.93E-01	1.35E-01	9.62E-02	4.93E-01	3.59E+00	3.72E+00	3
798	18.846	15.549	4	1.22E-01	5.09E-01	1.71E-01	1.22E-01	5.09E-01	3.73E+00	3.90E+00	3
804	18.624	18.999	3	7.57E+00	1.53E+02	1.06E+01	7.57E+00	1.53E+02	1.08E+03	1.09E+03	8
805	18.490	15.405	3	1.42E-02	1.63E-01	1.99E-02	1.42E-02	1.63E-01	1.16E+00	1.18E+00	2
814	18.952	19.064	6	7.43E+00	1.50E+02	1.04E+01	7.43E+00	1.50E+02	1.06E+03	1.07E+03	8
815	18.545	15.420	4	4.52E-02	2.87E-01	6.33E-02	4.52E-02	2.87E-01	2.07E+00	2.14E+00	2
816	18.738	15.415	5	8.33E-02	4.69E-01	1.17E-01	8.33E-02	4.69E-01	3.40E+00	3.52E+00	3
831	18.999	19.004	5	8.69E+00	1.82E+02	1.22E+01	8.69E+00	1.82E+02	1.29E+03	1.30E+03	8
832	18.739	19.068	4	7.97E+00	1.64E+02	1.12E+01	7.97E+00	1.64E+02	1.16E+03	1.17E+03	8
858	18.573	19.060	12	8.42E+00	1.76E+02	1.18E+01	8.42E+00	1.76E+02	1.24E+03	1.26E+03	8
859	18.800	19.065	3	1.00E+01	2.17E+02	1.40E+01	1.00E+01	2.17E+02	1.53E+03	1.55E+03	8
860	18.868	18.997	4	7.20E+00	1.44E+02	1.01E+01	7.20E+00	1.44E+02	1.02E+03	1.03E+03	8
861	18.943	15.543	6	1.20E-01	5.12E-01	1.68E-01	1.20E-01	5.12E-01	3.75E+00	3.92E+00	3
862	18.900	15.398	2	9.80E-02	4.64E-01	1.37E-01	9.80E-02	4.64E-01	3.39E+00	3.52E+00	3
865	18.790	15.396	2	9.26E-02	4.57E-01	1.30E-01	9.26E-02	4.57E-01	3.33E+00	3.46E+00	3
870	18.683	15.404	4	9.38E-02	4.61E-01	1.31E-01	9.38E-02	4.61E-01	3.36E+00	3.49E+00	3
873	18.898	15.544	4	1.25E-01	4.78E-01	1.75E-01	1.25E-01	4.78E-01	3.52E+00	3.70E+00	3
882	19.020	13.167	2	5.97E-03	0.00E+00	8.36E-03	5.97E-03	0.00E+00	8.36E-03	1.67E-02	1
887	18.486	15.329	3	1.28E-02	1.37E-01	1.79E-02	1.28E-02	1.37E-01	9.77E-01	9.95E-01	2
889	18.997	15.547	2	1.22E-01	4.61E-01	1.71E-01	1.22E-01	4.61E-01	3.40E+00	3.57E+00	3
890	18.440	15.406	2	4.78E-06	4.32E-02	6.69E-06	4.78E-06	4.32E-02	3.02E-01	3.02E-01	2
904	19.152	16.827	6	2.44E-01	9.72E-01	3.42E-01	2.44E-01	9.72E-01	7.15E+00	7.49E+00	4
906	19.286	16.899	3	3.32E-06	0.00E+00	4.65E-06	3.32E-06	0.00E+00	4.65E-06	9.30E-06	1
907	19.194	16.828	6	5.62E-02	4.09E-01	7.87E-02	5.62E-02	4.09E-01	2.94E+00	3.02E+00	3
908	19.152	16.901	2	2.47E-01	1.08E+00	3.46E-01	2.47E-01	1.08E+00	7.91E+00	8.25E+00	4
909	18.885	16.902	2	8.96E-01	3.10E+00	1.25E+00	8.96E-01	3.10E+00	2.30E+01	2.42E+01	5
910	19.239	16.901	3	7.86E-03	7.88E-02	1.10E-02	7.86E-03	7.88E-02	5.63E-01	5.74E-01	2
912	18.695	16.902	2	8.83E-01	3.09E+00	1.24E+00	8.83E-01	3.09E+00	2.29E+01	2.41E+01	5
927	18.594	15.407	4	8.21E-02	3.75E-01	1.15E-01	8.21E-02	3.75E-01	2.74E+00	2.85E+00	2
933	18.637	15.415	4	7.92E-02	4.38E-01	1.11E-01	7.92E-02	4.38E-01	3.18E+00	3.29E+00	3
949	18.996	16.900	2	9.02E-01	3.09E+00	1.26E+00	9.02E-01	3.09E+00	2.29E+01	2.42E+01	5
950	18.521	16.997	12	4.15E-01	1.52E+00	5.81E-01	4.15E-01	1.52E+00	1.12E+01	1.18E+01	4
951	18.949	16.902	2	8.89E-01	3.09E+00	1.24E+00	8.89E-01	3.09E+00	2.29E+01	2.41E+01	5
955	18.498	16.900	4	2.43E-01	9.55E-01	3.40E-01	2.43E-01	9.55E-01	7.03E+00	7.37E+00	4

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

960	18.452	16.901	4	6.33E-04	0.00E+00	8.86E-04	5.77E-03	3.08E-01	2.16E+00	2.16E+00	2
981	18.972	16.996	6	1.04E-01	2.22E-02	1.46E-01	5.76E-01	3.21E+00	2.33E+01	2.34E+01	5
984	18.538	16.909	2	4.97E-02	0.00E+00	6.96E-02	3.34E-01	1.59E+00	1.16E+01	1.17E+01	4
985	18.587	16.905	2	7.37E-02	8.57E-04	1.03E-01	4.96E-01	2.33E+00	1.70E+01	1.71E+01	5
992	18.792	16.910	6	7.86E-02	2.48E-03	1.10E-01	5.59E-01	2.91E+00	2.12E+01	2.13E+01	5
993	19.192	16.912	3	3.55E-03	0.00E+00	4.97E-03	2.39E-02	4.48E-01	3.17E+00	3.17E+00	3
994	19.043	16.912	8	7.25E-02	2.73E-03	1.02E-01	5.60E-01	2.67E+00	1.95E+01	1.96E+01	5
996	19.096	16.911	7	5.44E-02	2.11E-03	7.62E-02	4.18E-01	2.02E+00	1.47E+01	1.48E+01	4

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 24 rounds at aimpoint (17.65, 20.15)											
38	18.902	18.161	2	5.67E+00	7.11E+01	7.94E+00	5.67E+00	7.11E+01	5.06E+02	5.14E+02	8
40	18.900	18.232	2	6.38E+00	8.67E+01	8.93E+00	6.38E+00	8.67E+01	6.16E+02	6.25E+02	8
42	18.948	18.195	2	5.38E+00	6.77E+01	7.53E+00	5.38E+00	6.77E+01	4.81E+02	4.89E+02	8
147	18.748	18.163	7	5.19E+00	6.34E+01	7.27E+00	5.19E+00	6.34E+01	4.51E+02	4.58E+02	8
154	18.999	18.190	3	5.99E+00	7.76E+01	8.39E+00	5.99E+00	7.76E+01	5.52E+02	5.60E+02	8
220	18.777	18.253	4	6.20E+00	8.46E+01	8.68E+00	6.20E+00	8.46E+01	6.01E+02	6.10E+02	8
675	18.397	17.990	3	1.46E-05	0.00E+00	2.04E-05	1.46E-05	0.00E+00	2.04E-05	4.09E-05	1
770	18.800	19.002	2	4.35E+01	9.91E+02	6.09E+01	4.35E+01	9.91E+02	7.00E+03	7.06E+03	8
771	18.674	18.999	7	3.50E+01	7.98E+02	4.90E+01	3.50E+01	7.98E+02	5.64E+03	5.68E+03	8
772	18.736	18.998	8	3.19E+01	7.29E+02	4.47E+01	3.19E+01	7.29E+02	5.15E+03	5.19E+03	8
773	18.870	19.061	6	4.35E+01	1.02E+03	6.09E+01	4.35E+01	1.02E+03	7.20E+03	7.26E+03	8
775	18.651	19.059	8	3.59E+01	8.27E+02	5.03E+01	3.59E+01	8.27E+02	5.84E+03	5.89E+03	8
777	18.950	19.002	4	2.85E+01	6.56E+02	3.99E+01	2.85E+01	6.56E+02	4.63E+03	4.67E+03	8
778	18.793	15.558	1	1.54E+00	1.27E+00	2.16E+00	1.54E+00	1.27E+00	1.10E+01	1.32E+01	4
780	18.842	15.405	3	1.44E+00	1.15E+00	2.02E+00	1.44E+00	1.15E+00	1.01E+01	1.21E+01	4
782	18.636	15.483	5	1.43E+00	1.13E+00	2.00E+00	1.43E+00	1.13E+00	9.91E+00	1.19E+01	4
783	18.794	15.483	6	1.49E+00	1.18E+00	2.09E+00	1.49E+00	1.18E+00	1.03E+01	1.24E+01	4
784	18.591	15.481	2	1.25E+00	9.51E-01	1.75E+00	1.25E+00	9.51E-01	8.41E+00	1.02E+01	4
785	18.685	15.488	5	1.48E+00	1.19E+00	2.07E+00	1.48E+00	1.19E+00	1.04E+01	1.25E+01	4
786	18.543	15.483	4	8.94E-01	7.19E-01	1.25E+00	8.94E-01	7.19E-01	6.28E+00	7.54E+00	4
787	18.902	15.479	2	1.48E+00	1.18E+00	2.07E+00	1.48E+00	1.18E+00	1.03E+01	1.24E+01	4
788	18.949	15.474	3	1.48E+00	1.21E+00	2.07E+00	1.48E+00	1.21E+00	1.05E+01	1.26E+01	4
789	18.949	15.405	6	1.44E+00	1.16E+00	2.02E+00	1.44E+00	1.16E+00	1.01E+01	1.22E+01	4
790	18.844	15.477	2	1.49E+00	1.21E+00	2.09E+00	1.49E+00	1.21E+00	1.06E+01	1.26E+01	4
791	18.996	15.472	3	1.48E+00	1.13E+00	2.07E+00	1.48E+00	1.13E+00	9.98E+00	1.21E+01	4
792	18.997	15.406	5	1.44E+00	1.06E+00	2.02E+00	1.44E+00	1.06E+00	9.44E+00	1.15E+01	4
793	18.439	15.487	3	1.19E-01	1.36E-01	1.67E-01	1.19E-01	1.36E-01	1.12E+00	1.29E+00	2
794	18.489	15.483	3	4.37E-01	3.77E-01	6.12E-01	4.37E-01	3.77E-01	3.25E+00	3.86E+00	3
795	18.739	15.483	5	1.49E+00	1.21E+00	2.09E+00	1.49E+00	1.21E+00	1.06E+01	1.26E+01	4
798	18.846	15.549	4	1.54E+00	1.27E+00	2.16E+00	1.54E+00	1.27E+00	1.10E+01	1.32E+01	4
799	18.400	15.488	4	5.97E-06	0.00E+00	8.36E-06	5.97E-06	0.00E+00	8.36E-06	1.67E-05	1
804	18.624	18.999	3	3.54E+01	8.07E+02	4.96E+01	3.54E+01	8.07E+02	5.70E+03	5.75E+03	8
805	18.490	15.405	3	4.30E-01	3.66E-01	6.02E-01	4.30E-01	3.66E-01	3.16E+00	3.77E+00	3
814	18.952	19.064	6	3.72E+01	8.65E+02	5.21E+01	3.72E+01	8.65E+02	6.11E+03	6.16E+03	8
815	18.545	15.420	4	8.83E-01	6.97E-01	1.24E+00	8.83E-01	6.97E-01	6.12E+00	7.35E+00	4
816	18.738	15.415	5	1.44E+00	1.15E+00	2.02E+00	1.44E+00	1.15E+00	1.01E+01	1.21E+01	4
831	18.999	19.004	5	4.40E+01	1.01E+03	6.16E+01	4.40E+01	1.01E+03	7.13E+03	7.19E+03	8
832	18.739	19.068	4	4.08E+01	9.51E+02	5.71E+01	4.08E+01	9.51E+02	6.71E+03	6.77E+03	8
858	18.573	19.060	12	4.34E+01	1.02E+03	6.08E+01	4.34E+01	1.02E+03	7.20E+03	7.26E+03	8
859	18.800	19.065	3	5.49E+01	1.30E+03	7.69E+01	5.49E+01	1.30E+03	9.18E+03	9.25E+03	8
860	18.868	18.997	4	3.33E+01	7.59E+02	4.66E+01	3.33E+01	7.59E+02	5.36E+03	5.41E+03	8
861	18.943	15.543	6	1.53E+00	1.26E+00	2.14E+00	1.53E+00	1.26E+00	1.10E+01	1.31E+01	4
862	18.900	15.398	2	1.43E+00	1.09E+00	2.00E+00	1.43E+00	1.09E+00	9.63E+00	1.16E+01	4
865	18.790	15.396	2	1.43E+00	1.10E+00	2.00E+00	1.43E+00	1.10E+00	9.70E+00	1.17E+01	4
870	18.683	15.404	4	1.43E+00	1.11E+00	2.00E+00	1.43E+00	1.11E+00	9.77E+00	1.18E+01	4
873	18.898	15.544	4	1.53E+00	1.24E+00	2.14E+00	1.53E+00	1.24E+00	1.08E+01	1.30E+01	4
882	19.020	13.167	2	3.86E-02	2.85E-01	5.40E-02	3.86E-02	2.85E-01	2.05E+00	2.10E+00	2
887	18.486	15.329	3	3.88E-01	3.40E-01	5.43E-01	3.88E-01	3.40E-01	2.92E+00	3.47E+00	3
889	18.997	15.547	2	1.53E+00	1.21E+00	2.14E+00	1.53E+00	1.21E+00	1.06E+01	1.28E+01	4
890	18.440	15.406	2	1.18E-01	1.52E-01	1.65E-01	1.18E-01	1.52E-01	1.23E+00	1.39E+00	2
904	19.152	16.827	6	7.35E-01	2.55E+00	1.03E+00	7.35E-01	2.55E+00	1.89E+01	1.99E+01	5
906	19.286	16.899	3	6.69E-06	0.00E+00	9.37E-06	6.69E-06	0.00E+00	9.37E-06	1.87E-05	1
907	19.194	16.828	6	2.07E-01	9.79E-01	2.90E-01	2.07E-01	9.79E-01	7.14E+00	7.43E+00	4

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

908	19.152	16.901	2	1.12E-01	1.43E-01	1.57E-01	4.68E-01	2.51E+00	1.82E+01	1.84E+01	5
909	18.885	16.902	2	3.82E-01	3.96E-01	5.35E-01	1.59E+00	7.46E+00	5.44E+01	5.50E+01	7
910	19.239	16.901	3	1.66E-03	7.92E-03	2.32E-03	1.12E-02	1.55E-01	1.10E+00	1.10E+00	2
912	18.695	16.902	2	3.93E-01	4.03E-01	5.50E-01	1.60E+00	7.47E+00	5.45E+01	5.51E+01	7
927	18.594	15.407	4	0.00E+00	0.00E+00	0.00E+00	1.04E+00	8.33E-01	7.29E+00	7.29E+00	4
933	18.637	15.415	4	0.00E+00	0.00E+00	0.00E+00	1.17E+00	1.00E+00	8.64E+00	8.64E+00	4
949	18.996	16.900	2	3.76E-01	3.93E-01	5.26E-01	1.59E+00	7.45E+00	5.44E+01	5.49E+01	7
950	18.521	16.997	12	2.05E-01	3.51E-01	2.87E-01	7.40E-01	3.73E+00	2.71E+01	2.74E+01	5
951	18.949	16.902	2	3.79E-01	3.89E-01	5.31E-01	1.58E+00	7.47E+00	5.45E+01	5.50E+01	7
955	18.498	16.900	4	1.03E-01	8.81E-02	1.44E-01	4.53E-01	2.27E+00	1.65E+01	1.67E+01	5
959	18.643	16.902	9	3.94E-01	3.88E-01	5.52E-01	1.58E+00	7.33E+00	5.35E+01	5.41E+01	7
960	18.452	16.901	4	1.04E-02	3.69E-03	1.46E-02	7.69E-02	7.30E-01	5.22E+00	5.23E+00	3
981	18.972	16.996	6	4.35E-01	8.47E-01	6.09E-01	1.59E+00	8.29E+00	6.03E+01	6.09E+01	7
984	18.538	16.909	2	2.40E-01	2.07E-01	3.36E-01	9.60E-01	4.21E+00	3.08E+01	3.12E+01	6
985	18.587	16.905	2	3.63E-01	3.37E-01	5.08E-01	1.43E+00	6.20E+00	4.54E+01	4.59E+01	6
992	18.792	16.910	6	3.93E-01	4.16E-01	5.50E-01	1.59E+00	7.51E+00	5.48E+01	5.53E+01	7
993	19.192	16.912	3	2.54E-02	5.77E-02	3.56E-02	1.19E-01	1.01E+00	7.24E+00	7.27E+00	4
994	19.043	16.912	8	3.75E-01	4.01E-01	5.25E-01	1.54E+00	6.96E+00	5.09E+01	5.14E+01	7
996	19.096	16.911	7	2.85E-01	3.27E-01	3.99E-01	1.16E+00	5.25E+00	3.84E+01	3.88E+01	6

VX 250kg TBM
Light Attack
Height of Release: 500m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 1 round at aimpoint (18.40, 35.30)											
38	18.902	18.161	2	8.95E-02	8.99E-01	1.25E-01	8.95E-02	8.99E-01	6.42E+00	6.54E+00	4
40	18.900	18.232	2	9.44E-02	9.21E-01	1.32E-01	9.44E-02	9.21E-01	6.58E+00	6.71E+00	4
42	18.948	18.195	2	9.16E-02	7.10E-01	1.28E-01	9.16E-02	7.10E-01	5.10E+00	5.23E+00	3
147	18.748	18.163	7	1.51E-01	1.72E+00	2.11E-01	1.51E-01	1.72E+00	1.23E+01	1.25E+01	4
154	18.999	18.190	3	9.13E-02	4.93E-01	1.28E-01	9.13E-02	4.93E-01	3.58E+00	3.71E+00	3
220	18.777	18.253	4	1.42E-01	1.58E+00	1.99E-01	1.42E-01	1.58E+00	1.13E+01	1.15E+01	4
282	17.696	17.960	2	2.10E-02	6.24E-02	2.94E-02	2.10E-02	6.24E-02	4.66E-01	4.96E-01	2
284	17.741	17.997	2	5.11E-02	2.42E-01	7.15E-02	5.11E-02	2.42E-01	1.77E+00	1.84E+00	2
285	17.693	18.039	2	2.32E-02	7.88E-02	3.25E-02	2.32E-02	7.88E-02	5.84E-01	6.17E-01	2
426	17.792	17.981	3	8.54E-02	4.49E-01	1.20E-01	8.54E-02	4.49E-01	3.26E+00	3.38E+00	3
504	18.916	27.909	4	7.86E-02	6.61E-01	1.10E-01	7.86E-02	6.61E-01	4.74E+00	4.85E+00	3
507	18.109	24.003	2	2.76E-01	4.77E+00	3.86E-01	2.76E-01	4.77E+00	3.38E+01	3.42E+01	6
514	18.007	24.004	1	2.14E-01	2.87E+00	3.00E-01	2.14E-01	2.87E+00	2.04E+01	2.07E+01	5
522	18.603	29.041	2	6.88E-01	1.81E+01	9.63E-01	6.88E-01	1.81E+01	1.28E+02	1.29E+02	8
523	18.604	28.948	2	6.74E-01	1.76E+01	9.44E-01	6.74E-01	1.76E+01	1.24E+02	1.25E+02	8
524	18.297	18.033	2	2.19E-01	2.70E+00	3.07E-01	2.19E-01	2.70E+00	1.92E+01	1.95E+01	5
525	18.296	17.953	2	2.22E-01	2.65E+00	3.11E-01	2.22E-01	2.65E+00	1.89E+01	1.92E+01	5
526	18.347	17.998	2	2.13E-01	2.75E+00	2.98E-01	2.13E-01	2.75E+00	1.95E+01	1.98E+01	5
547	18.194	23.907	2	3.76E-01	6.38E+00	5.26E-01	3.76E-01	6.38E+00	4.52E+01	4.57E+01	6
548	18.195	24.003	5	3.85E-01	6.57E+00	5.39E-01	3.85E-01	6.57E+00	4.65E+01	4.71E+01	6
550	17.921	24.011	1	1.03E-01	1.67E+00	1.44E-01	1.03E-01	1.67E+00	1.18E+01	1.20E+01	4
551	17.953	24.010	1	1.46E-01	2.10E+00	2.04E-01	1.46E-01	2.10E+00	1.49E+01	1.51E+01	5
552	17.984	24.006	1	1.89E-01	2.52E+00	2.65E-01	1.89E-01	2.52E+00	1.79E+01	1.82E+01	5
566	18.896	28.003	9	9.47E-02	9.09E-01	1.33E-01	9.47E-02	9.09E-01	6.50E+00	6.63E+00	4
567	18.792	28.006	4	1.55E-01	3.50E+00	2.17E-01	1.55E-01	3.50E+00	2.47E+01	2.49E+01	5
568	18.698	28.005	9	3.96E-01	8.10E+00	5.54E-01	3.96E-01	8.10E+00	5.73E+01	5.78E+01	7
569	18.591	28.007	9	6.60E-01	1.59E+01	9.24E-01	6.60E-01	1.59E+01	1.12E+02	1.13E+02	8
608	18.150	24.013	2	3.28E-01	5.64E+00	4.59E-01	3.28E-01	5.64E+00	3.99E+01	4.04E+01	6
610	18.058	24.013	3	2.41E-01	3.83E+00	3.37E-01	2.41E-01	3.83E+00	2.71E+01	2.75E+01	5
621	18.699	29.056	8	3.12E-01	8.33E+00	4.37E-01	3.12E-01	8.33E+00	5.87E+01	5.92E+01	7
622	18.700	28.951	8	3.13E-01	8.23E+00	4.38E-01	3.13E-01	8.23E+00	5.80E+01	5.85E+01	7
623	18.803	29.056	8	1.40E-01	2.51E+00	1.96E-01	1.40E-01	2.51E+00	1.78E+01	1.80E+01	5
624	18.800	28.952	8	1.45E-01	2.64E+00	2.03E-01	1.45E-01	2.64E+00	1.87E+01	1.89E+01	5
625	18.895	29.057	8	6.77E-02	4.39E-01	9.48E-02	6.77E-02	4.39E-01	3.17E+00	3.26E+00	3
626	18.894	28.945	8	7.91E-02	5.04E-01	1.11E-01	7.91E-02	5.04E-01	3.64E+00	3.75E+00	3
627	19.005	29.055	2	5.77E-05	0.00E+00	8.08E-05	5.77E-05	0.00E+00	8.08E-05	1.62E-04	1
628	19.003	28.949	2	6.86E-05	0.00E+00	9.60E-05	6.86E-05	0.00E+00	9.60E-05	1.92E-04	1
655	18.499	29.000	8	1.16E+00	2.95E+01	1.62E+00	1.16E+00	2.95E+01	2.08E+02	2.10E+02	8
656	17.757	23.952	4	2.47E-02	2.84E-01	3.46E-02	2.47E-02	2.84E-01	2.02E+00	2.06E+00	2
658	18.138	17.962	7	1.76E-01	2.09E+00	2.46E-01	1.76E-01	2.09E+00	1.49E+01	1.51E+01	5
665	18.125	23.910	2	2.97E-01	5.01E+00	4.16E-01	2.97E-01	5.01E+00	3.55E+01	3.59E+01	6
675	18.397	17.990	3	2.05E-01	2.80E+00	2.87E-01	2.05E-01	2.80E+00	1.99E+01	2.02E+01	5
703	18.813	27.821	2	1.43E-01	2.88E+00	2.00E-01	1.43E-01	2.88E+00	2.04E+01	2.06E+01	5

Table A4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

992	18.792	16.910	6	4.29E-02	1.37E+00	6.01E-02	4.29E-02	1.37E+00	9.65E+00	9.71E+00	4
993	19.192	16.912	3	1.60E-02	8.59E-01	2.24E-02	1.60E-02	8.59E-01	6.04E+00	6.06E+00	4
994	19.043	16.912	8	2.41E-02	1.05E+00	3.37E-02	2.41E-02	1.05E+00	7.38E+00	7.42E+00	4
996	19.096	16.911	7	2.12E-02	9.83E-01	2.97E-02	2.12E-02	9.83E-01	6.91E+00	6.94E+00	4
997	17.947	17.000	2	9.67E-02	2.26E+00	1.35E-01	9.67E-02	2.26E+00	1.60E+01	1.61E+01	5
998	15.618	13.553	8	1.93E-04	3.29E-01	2.70E-04	1.93E-04	3.29E-01	2.30E+00	2.30E+00	2
999	15.370	13.551	12	0.00E+00	1.88E-01	0.00E+00	0.00E+00	1.88E-01	1.32E+00	1.32E+00	2

Case 2: Protected 2 rounds at aimpoint (20.70, 33.85)

117	20.256	33.206	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-02	6.78E-01	6.78E-01	2
118	20.349	33.200	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.99E-01	6.29E+00	6.29E+00	4
134	20.300	33.198	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-01	1.04E+00	1.04E+00	2
136	20.211	33.205	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-02	1.31E-01	1.31E-01	1
165	20.395	33.192	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+00	9.38E+00	9.38E+00	4
168	20.555	33.205	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-01	8.75E-01	8.75E-01	2
172	20.494	33.196	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-01	2.18E+00	2.18E+00	2
174	20.901	33.191	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-01	4.94E+00	4.94E+00	3
175	20.950	33.190	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E+01	2.09E+02	2.09E+02	8
176	20.850	33.193	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-02	4.08E-01	4.08E-01	2
177	20.993	33.189	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E+01	3.94E+02	3.94E+02	8
178	20.801	33.194	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	8.05E-03	8.05E-03	1
179	20.448	33.195	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-01	6.25E+00	6.25E+00	4
180	20.316	33.264	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E+00	1.74E+01	1.74E+01	5
181	20.923	33.281	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E+00	9.17E+00	9.17E+00	4
183	20.524	33.279	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E+00	1.35E+01	1.35E+01	4

VX 500kg TBM
Heavy Attack
Height of Release: 800m

Height of Release: 600m											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected 4 rounds at aimpoint (17.75, 46.95)											
10	17.002	44.010	4	9.03E-05	0.00E+00	1.26E-04	9.03E-05	0.00E+00	1.26E-04	2.53E-04	1
11	17.200	44.005	4	2.48E-01	5.81E-01	3.47E-01	2.48E-01	5.81E-01	4.41E+00	4.76E+00	3
12	17.295	44.011	4	7.16E-01	1.98E+01	1.00E+00	7.16E-01	1.98E+01	1.40E+02	1.41E+02	8
13	17.396	44.010	4	1.03E+00	1.09E+02	1.44E+00	1.03E+00	1.09E+02	7.64E+02	7.66E+02	8
14	17.497	44.008	4	1.12E+00	1.27E+02	1.57E+00	1.12E+00	1.27E+02	8.91E+02	8.92E+02	8
38	18.902	18.161	2	6.73E-02	9.75E-01	9.42E-02	6.73E-02	9.75E-01	6.92E+00	7.01E+00	4
40	18.900	18.232	2	7.12E-02	1.02E+00	9.97E-02	7.12E-02	1.02E+00	7.24E+00	7.34E+00	4
42	18.948	18.195	2	5.60E-02	8.11E-01	7.84E-02	5.60E-02	8.11E-01	5.76E+00	5.83E+00	3
49	16.757	40.584	2	6.93E-04	0.00E+00	9.70E-04	6.93E-04	0.00E+00	9.70E-04	1.94E-03	1
50	16.824	40.583	2	7.28E-03	0.00E+00	1.02E-02	7.28E-03	0.00E+00	1.02E-02	2.04E-02	1
81	18.700	43.505	9	2.79E-06	0.00E+00	3.91E-06	2.79E-06	0.00E+00	3.91E-06	7.81E-06	1
110	19.105	37.519	3	1.35E-06	0.00E+00	1.89E-06	1.35E-06	0.00E+00	1.89E-06	3.78E-06	1
139	18.080	34.232	4	2.53E+00	6.30E+01	3.54E+00	2.53E+00	6.30E+01	4.45E+02	4.48E+02	8
147	18.748	18.163	7	1.10E-01	1.57E+00	1.54E-01	1.10E-01	1.57E+00	1.11E+01	1.13E+01	4
154	18.999	18.190	3	5.33E-02	6.35E-01	7.46E-02	5.33E-02	6.35E-01	4.52E+00	4.59E+00	3
160	16.786	40.595	2	3.49E-03	0.00E+00	4.89E-03	3.49E-03	0.00E+00	4.89E-03	9.77E-03	1
189	17.005	43.776	2	1.15E-04	0.00E+00	1.61E-04	1.15E-04	0.00E+00	1.61E-04	3.22E-04	1
202	19.105	37.614	4	1.14E-06	0.00E+00	1.60E-06	1.14E-06	0.00E+00	1.60E-06	3.19E-06	1
203	19.012	37.620	4	3.47E-06	0.00E+00	4.86E-06	3.47E-06	0.00E+00	4.86E-06	9.72E-06	1
220	18.777	18.253	4	1.08E-01	1.51E+00	1.51E-01	1.08E-01	1.51E+00	1.07E+01	1.09E+01	4
282	17.696	17.960	2	2.67E-01	3.30E+00	3.74E-01	2.67E-01	3.30E+00	2.35E+01	2.38E+01	5
284	17.741	17.997	2	2.78E-01	3.40E+00	3.89E-01	2.78E-01	3.40E+00	2.42E+01	2.46E+01	5
285	17.693	18.039	2	2.75E-01	3.37E+00	3.85E-01	2.75E-01	3.37E+00	2.40E+01	2.44E+01	5
403	17.533	17.964	7	2.41E-01	3.08E+00	3.37E-01	2.41E-01	3.08E+00	2.19E+01	2.22E+01	5
426	17.792	17.981	3	2.78E-01	3.40E+00	3.89E-01	2.78E-01	3.40E+00	2.42E+01	2.46E+01	5
479	17.571	18.054	4	2.57E-01	3.22E+00	3.60E-01	2.57E-01	3.22E+00	2.29E+01	2.33E+01	5
496	19.304	28.008	4	8.45E-06	0.00E+00	1.18E-05	8.45E-06	0.00E+00	1.18E-05	2.37E-05	1
497	19.200	28.005	4	2.76E-05	0.00E+00	3.86E-05	2.76E-05	0.00E+00	3.86E-05	7.73E-05	1
498	19.110	28.004	4	1.64E-02	5.46E-03	2.30E-02	1.64E-02	5.46E-03	6.12E-02	8.41E-02	1
504	18.916	27.909	4	9.48E-02	5.97E-01	1.33E-01	9.48E-02	5.97E-01	4.31E+00	4.44E+00	3
507	18.109	24.003	2	8.79E-01	1.41E+01	1.23E+00	8.79E-01	1.41E+01	9.99E+01	1.01E+02	8
514	18.007	24.004	1	9.24E-01	1.50E+01	1.29E+00	9.24E-01	1.50E+01	1.06E+02	1.08E+02	8
517	16.593	22.938	2	1.33E-01	1.02E+00	1.86E-01	1.33E-01	1.02E+00	7.33E+00	7.51E+00	4
519	16.235	22.881	1	8.83E-03	1.36E-01	1.24E-02	8.83E-03	1.36E-01	9.64E-01	9.77E-01	2
520	16.298	22.879	1	1.54E-02	2.36E-01	1.26E-02	1.54E-02	2.36E-01	1.67E+00	1.70E+00	2
522	18.603	29.041	2	3.95E-01	6.50E+00	5.53E-01	3.95E-01	6.50E+00	4.61E+01	4.66E+01	6
523	18.604	28.948	2	3.93E-01	6.42E+00	5.50E-01	3.93E-01	6.42E+00	4.55E+01	4.60E+01	6
524	18.297	18.033	2	2.64E-01	2.86E+00	3.70E-01	2.64E-01	2.86E+00	2.04E+01	2.08E+01	5

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Mustard (HD) 152mm Artillery
Light Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (10.55, 43.65)									
361	10.504	43.454	8	9.72E+00	3.89E+01	6.53E+01	2	1	2
363	10.602	43.452	8	7.60E+01	1.90E+02	3.47E+02	4	3	4
365	10.602	43.552	8	3.16E+02	7.92E+02	1.45E+03	6	6	6
382	10.502	43.550	8	2.80E+01	5.84E+01	1.11E+02	2	1	3

**Case 2a: Protected (Eye,
Respiratory Exposure)**

18 rounds at aimpoint (13.35, 41.15)									
330	13.388	41.003	9	3.31E-01	9.07E+02	3.31E-01	1	1	
331	13.290	41.005	4	1.26E-06	0.00E+00	1.26E-06	1	1	
448	13.375	40.781	2	1.87E-02	2.51E+00	1.87E-02	1	1	

**Case 2b: Protected (Skin
Exposure)**

18 rounds at aimpoint (13.35, 41.15)									
330	13.388	41.003	9	4.70E+00	2.59E+03	3.70E+03			7
331	13.290	41.005	4	3.40E-05	0.00E+00	3.40E-05			1
448	13.375	40.781	2	5.36E-02	7.65E+00	1.10E+01			1

Mustard (HD) MRLS
Moderate Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (17.80, 21.15)									
282	17.696	17.960	2	1.07E+02	0.00E+00	1.07E+02	5	4	3
284	17.741	17.997	2	1.15E+02	0.00E+00	1.15E+02	5	4	3
285	17.693	18.039	2	1.09E+02	0.00E+00	1.09E+02	5	4	3
403	17.533	17.964	7	4.86E+01	0.00E+00	4.86E+01	2	1	2
426	17.792	17.981	3	1.14E+02	0.00E+00	1.14E+02	5	4	3
479	17.571	18.054	4	6.71E+01	0.00E+00	6.71E+01	3	2	2
524	18.297	18.033	2	2.95E-02	0.00E+00	2.95E-02	1	1	1
525	18.296	17.953	2	4.58E-02	0.00E+00	4.58E-02	1	1	1
658	18.138	17.962	7	3.13E+01	0.00E+00	3.13E+01	2	1	2
734	18.172	18.053	4	1.68E+01	0.00E+00	1.68E+01	2	1	1
761	17.998	18.471	4	1.14E+02	0.00E+00	1.14E+02	5	4	3
767	17.905	18.470	4	1.10E+02	0.00E+00	1.10E+02	5	4	3
768	18.003	14.798	7	3.26E+01	0.00E+00	3.26E+01	2	1	2
774	17.506	14.808	6	1.24E+01	0.00E+00	1.24E+01	2	1	1
776	17.999	14.606	4	2.84E+01	0.00E+00	2.84E+01	2	1	2
823	17.948	18.476	2	1.13E+02	0.00E+00	1.13E+02	5	4	3
846	17.548	14.720	33	1.73E+01	0.00E+00	1.73E+01	2	1	1
847	17.452	14.713	7	5.03E+00	0.00E+00	5.03E+00	2	1	1
848	17.619	14.598	28	2.38E+01	0.00E+00	2.38E+01	2	1	1
849	17.847	14.523	14	2.78E+01	0.00E+00	2.78E+01	2	1	2
850	17.645	14.519	5	2.43E+01	0.00E+00	2.43E+01	2	1	1
851	17.522	14.526	16	1.16E+01	0.00E+00	1.16E+01	2	1	1
852	17.775	18.473	40	1.29E+02	0.00E+00	1.29E+02	5	4	3
854	17.942	18.391	2	1.12E+02	0.00E+00	1.12E+02	5	4	3
855	17.799	18.399	5	1.27E+02	0.00E+00	1.27E+02	5	4	3
856	17.750	14.796	9	3.85E+01	0.00E+00	3.85E+01	2	1	2
864	17.794	14.710	24	3.54E+01	0.00E+00	3.54E+01	2	1	2
868	17.645	14.717	10	2.92E+01	0.00E+00	2.92E+01	2	1	2
872	17.453	14.800	1	5.63E+00	0.00E+00	5.63E+00	2	1	1
879	17.501	20.109	2	2.47E+01	2.52E-02	2.47E+01	2	1	1
883	17.944	14.715	6	3.17E+01	0.00E+00	3.17E+01	2	1	2
885	17.712	14.726	1	3.49E+01	0.00E+00	3.49E+01	2	1	2
886	17.630	18.485	1	9.80E+01	0.00E+00	9.80E+01	4	3	2

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

911	17.490	16.998	2	2.58E+01	0.00E+00	2.58E+01	2	1	2
913	17.539	17.001	2	4.18E+01	0.00E+00	4.18E+01	2	1	2
914	18.004	17.005	3	7.61E+01	0.00E+00	7.61E+01	4	3	2
915	17.953	16.928	3	8.13E+01	0.00E+00	8.13E+01	4	3	2
916	18.006	16.927	3	7.40E+01	0.00E+00	7.40E+01	4	3	2
917	18.056	16.923	3	5.99E+01	0.00E+00	5.99E+01	3	2	2
918	18.099	16.922	4	4.40E+01	0.00E+00	4.40E+01	2	1	2
919	17.894	16.929	2	8.43E+01	0.00E+00	8.43E+01	4	3	2
934	17.893	16.999	2	8.58E+01	0.00E+00	8.58E+01	4	3	2
935	18.196	17.004	3	9.54E+00	0.00E+00	9.54E+00	2	1	1
936	17.843	17.001	2	8.85E+01	0.00E+00	8.85E+01	4	3	2
952	18.150	17.000	3	2.30E+01	0.00E+00	2.30E+01	2	1	1
953	18.055	17.000	3	6.14E+01	0.00E+00	6.14E+01	3	2	2
954	18.098	16.998	3	4.51E+01	0.00E+00	4.51E+01	2	1	2
956	17.792	17.000	2	9.15E+01	0.00E+00	9.15E+01	4	3	2
957	17.746	16.997	2	9.23E+01	0.00E+00	9.23E+01	4	3	2
958	17.696	16.997	2	8.66E+01	0.00E+00	8.66E+01	4	3	2
963	18.299	16.903	1	2.38E-02	0.00E+00	2.38E-02	1	1	1
964	18.250	16.903	1	1.19E+00	0.00E+00	1.19E+00	1	1	1
965	18.196	16.903	1	9.41E+00	0.00E+00	9.41E+00	2	1	1
966	18.145	16.907	1	2.48E+01	0.00E+00	2.48E+01	2	1	1
967	17.841	16.917	1	8.69E+01	0.00E+00	8.69E+01	4	3	2
986	17.597	17.004	1	6.18E+01	0.00E+00	6.18E+01	3	2	2
988	17.649	17.006	2	7.69E+01	0.00E+00	7.69E+01	4	3	2
997	17.947	17.000	2	8.31E+01	0.00E+00	8.31E+01	4	3	2

240 rounds at aimpoint (21.25, 45.55)

39	21.004	44.154	2	5.86E-02	0.00E+00	5.86E-02	1	1	
41	21.000	44.242	2	1.35E+00	0.00E+00	1.35E+00	1	1	
122	21.105	44.253	8	2.89E+00	0.00E+00	2.89E+00	1	1	
123	21.204	44.156	8	3.57E-01	0.00E+00	3.57E-01	1	1	
124	21.203	44.253	8	3.62E+00	0.00E+00	3.62E+00	1	1	
125	21.299	44.254	8	1.94E+00	0.00E+00	1.94E+00	1	1	
126	21.403	44.154	2	3.20E-01	0.00E+00	3.20E-01	1	1	
127	21.403	44.258	2	4.38E+00	0.00E+00	4.38E+00	1	1	
128	21.105	44.158	8	2.75E-01	0.00E+00	2.75E-01	1	1	
129	21.297	44.160	8	2.62E-01	0.00E+00	2.62E-01	1	1	
130	21.592	44.211	3	5.22E-02	0.00E+00	5.22E-02	1	1	
144	20.905	44.199	8	2.07E-03	0.00E+00	2.07E-03	1	1	
153	21.488	44.195	3	8.54E-01	0.00E+00	8.54E-01	1	1	

240 rounds at aimpoint (21.25, 45.55)

5	21.072	42.916	4	2.67E+01	0.00E+00	2.67E+01			2
6	21.655	42.899	4	6.29E-01	0.00E+00	6.29E-01			1
19	21.406	43.011	4	4.94E+01	0.00E+00	4.94E+01			2
20	21.498	43.009	4	4.07E+01	0.00E+00	4.07E+01			2
21	21.592	43.010	4	1.12E+01	0.00E+00	1.12E+01			1
39	21.004	44.154	2	6.60E+01	0.00E+00	6.60E+01			2
41	21.000	44.242	2	6.13E+01	0.00E+00	6.13E+01			2
89	20.902	43.008	9	5.06E+00	0.00E+00	5.06E+00			1
90	21.104	43.007	4	4.33E+01	0.00E+00	4.33E+01			2
91	21.004	43.009	9	2.76E+01	0.00E+00	2.76E+01			2
92	21.192	43.013	9	5.66E+01	0.00E+00	5.66E+01			2
122	21.105	44.253	8	1.03E+02	0.00E+00	1.03E+02			3
123	21.204	44.156	8	1.18E+02	0.00E+00	1.18E+02			3
124	21.203	44.253	8	1.11E+02	1.63E-03	1.11E+02			3
125	21.299	44.254	8	9.94E+01	0.00E+00	9.94E+01			2
126	21.403	44.154	2	1.05E+02	0.00E+00	1.05E+02			3
127	21.403	44.258	2	9.98E+01	0.00E+00	9.98E+01			2
128	21.105	44.158	8	1.06E+02	0.00E+00	1.06E+02			3
129	21.297	44.160	8	1.07E+02	0.00E+00	1.07E+02			3
130	21.592	44.211	3	1.48E+01	0.00E+00	1.48E+01			1
144	20.905	44.199	8	7.52E+00	0.00E+00	7.52E+00			1
153	21.488	44.195	3	9.75E+01	0.00E+00	9.75E+01			2
210	21.403	42.836	4	2.34E+01	0.00E+00	2.34E+01			1

**Case 2a: Protected (Eye,
Respiratory Exposure)**

**Case 2b: Protected (Skin
Exposure)**

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Mustard (HD) MRLS
Heavy Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (18.25, 24.40)									
38	18.902	18.161	2	2.14E+01	0.00E+00	2.14E+01	2	1	1
40	18.900	18.232	2	2.18E+01	0.00E+00	2.18E+01	2	1	1
42	18.948	18.195	2	1.11E+01	0.00E+00	1.11E+01	2	1	1
147	18.748	18.163	7	8.47E+01	0.00E+00	8.47E+01	4	3	2
154	18.999	18.190	3	4.49E+00	0.00E+00	4.49E+00	1	1	1
220	18.777	18.253	4	7.14E+01	0.00E+00	7.14E+01	4	3	2
282	17.696	17.960	2	5.52E+01	0.00E+00	5.52E+01	3	2	2
284	17.741	17.997	2	7.54E+01	0.00E+00	7.54E+01	4	3	2
285	17.693	18.039	2	5.42E+01	0.00E+00	5.42E+01	3	2	2
403	17.533	17.964	7	9.05E+00	0.00E+00	9.05E+00	2	1	1
426	17.792	17.981	3	9.91E+01	0.00E+00	9.91E+01	4	3	2
479	17.571	18.054	4	1.61E+01	0.00E+00	1.61E+01	2	1	1
507	18.109	24.003	2	2.54E+02	6.89E+02	1.24E+03	6	6	6
514	18.007	24.004	1	3.08E+02	8.11E+02	1.47E+03	6	6	6
524	18.297	18.033	2	1.97E+02	0.00E+00	1.97E+02	6	5	3
525	18.296	17.953	2	1.95E+02	0.00E+00	1.95E+02	6	5	3
526	18.347	17.998	2	1.92E+02	0.00E+00	1.92E+02	6	5	3
547	18.194	23.907	2	3.04E+02	6.71E+02	1.26E+03	6	6	6
548	18.195	24.003	5	3.58E+02	9.12E+02	1.66E+03	6	6	7
550	17.921	24.011	1	2.37E+02	7.24E+02	1.27E+03	6	5	6
551	17.953	24.010	1	3.71E+02	1.05E+03	1.87E+03	6	6	7
552	17.984	24.006	1	3.56E+02	9.41E+02	1.70E+03	6	6	7
608	18.150	24.013	2	1.11E+02	2.74E+02	5.02E+02	5	4	5
610	18.058	24.013	3	9.37E+01	2.59E+02	4.64E+02	4	3	4
656	17.757	23.952	4	2.49E+02	4.48E+02	8.89E+02	6	5	6
658	18.138	17.962	7	1.93E+02	0.00E+00	1.93E+02	6	5	3
665	18.125	23.910	2	3.05E+02	5.40E+02	1.08E+03	6	6	6
675	18.397	17.990	3	1.88E+02	0.00E+00	1.88E+02	6	5	3
734	18.172	18.053	4	1.97E+02	0.00E+00	1.97E+02	6	5	3
743	18.009	23.927	4	3.16E+02	1.42E+03	2.34E+03	6	6	7
744	18.059	23.922	3	1.89E+02	1.28E+03	2.02E+03	6	5	7
745	18.002	23.818	14	3.55E+02	5.36E+02	1.12E+03	6	6	6
746	18.194	23.815	3	2.54E+02	2.65E+02	6.33E+02	6	6	5
761	17.998	18.471	4	1.81E+02	0.00E+00	1.81E+02	6	5	3
767	17.905	18.470	4	1.54E+02	0.00E+00	1.54E+02	6	5	3
768	18.003	14.798	7	1.25E+02	0.00E+00	1.25E+02	5	4	3
770	18.800	19.002	2	6.19E+01	0.00E+00	6.19E+01	3	2	2
771	18.674	18.999	7	1.29E+02	0.00E+00	1.29E+02	5	4	3
772	18.736	18.998	8	9.68E+01	0.00E+00	9.68E+01	4	3	2
773	18.870	19.061	6	3.09E+01	0.00E+00	3.09E+01	2	1	2
774	17.506	14.808	6	5.02E+00	0.00E+00	5.02E+00	2	1	1
775	18.651	19.059	8	1.41E+02	0.00E+00	1.41E+02	5	4	3
776	17.999	14.606	4	1.22E+02	0.00E+00	1.22E+02	5	4	3
777	18.950	19.002	4	9.44E+00	0.00E+00	9.44E+00	2	1	1
778	18.793	15.558	1	5.21E+01	0.00E+00	5.21E+01	3	2	2
780	18.842	15.405	3	3.59E+01	0.00E+00	3.59E+01	2	1	2
782	18.636	15.483	5	1.03E+02	0.00E+00	1.03E+02	5	4	3
783	18.794	15.483	6	5.13E+01	0.00E+00	5.13E+01	3	2	2
784	18.591	15.481	2	1.16E+02	0.00E+00	1.16E+02	5	4	3
785	18.685	15.488	5	8.71E+01	0.00E+00	8.71E+01	4	3	2
786	18.543	15.483	4	1.28E+02	0.00E+00	1.28E+02	5	4	3
787	18.902	15.479	2	2.01E+01	0.00E+00	2.01E+01	2	1	1
788	18.949	15.474	3	1.10E+01	0.00E+00	1.10E+01	2	1	1

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

789	18.949	15.405	6	1.09E+01	0.00E+00	1.09E+01	2	1	1
790	18.844	15.477	2	3.55E+01	0.00E+00	3.55E+01	2	1	2
791	18.996	15.472	3	5.43E+00	0.00E+00	5.43E+00	2	1	1
792	18.997	15.406	5	5.29E+00	0.00E+00	5.29E+00	2	1	1
793	18.439	15.487	3	1.45E+02	0.00E+00	1.45E+02	5	4	3
794	18.489	15.483	3	1.38E+02	0.00E+00	1.38E+02	5	4	3
795	18.739	15.483	5	6.94E+01	0.00E+00	6.94E+01	3	2	2
798	18.846	15.549	4	3.51E+01	0.00E+00	3.51E+01	2	1	2
799	18.400	15.488	4	1.49E+02	0.00E+00	1.49E+02	5	4	3
804	18.624	18.999	3	1.52E+02	0.00E+00	1.52E+02	6	5	3
805	18.490	15.405	3	1.37E+02	0.00E+00	1.37E+02	5	4	3
814	18.952	19.064	6	8.98E+00	0.00E+00	8.98E+00	2	1	1
815	18.545	15.420	4	1.27E+02	0.00E+00	1.27E+02	5	4	3
816	18.738	15.415	5	6.92E+01	0.00E+00	6.92E+01	3	2	2
823	17.948	18.476	2	1.69E+02	0.00E+00	1.69E+02	6	5	3
831	18.999	19.004	5	3.51E+00	0.00E+00	3.51E+00	1	1	1
832	18.739	19.068	4	9.56E+01	0.00E+00	9.56E+01	4	3	2
846	17.548	14.720	33	1.01E+01	0.00E+00	1.01E+01	2	1	1
847	17.452	14.713	7	9.88E-01	0.00E+00	9.88E-01	1	1	1
848	17.619	14.598	28	2.25E+01	0.00E+00	2.25E+01	2	1	1
849	17.847	14.523	14	8.63E+01	0.00E+00	8.63E+01	4	3	2
850	17.645	14.519	5	2.75E+01	0.00E+00	2.75E+01	2	1	2
851	17.522	14.526	16	6.63E+00	0.00E+00	6.63E+00	2	1	1
852	17.775	18.473	40	9.48E+01	0.00E+00	9.48E+01	4	3	2
854	17.942	18.391	2	1.66E+02	0.00E+00	1.66E+02	6	5	3
855	17.799	18.399	5	1.06E+02	0.00E+00	1.06E+02	5	4	3
856	17.750	14.796	9	5.86E+01	0.00E+00	5.86E+01	3	2	2
858	18.573	19.060	12	1.70E+02	0.00E+00	1.70E+02	6	5	3
859	18.800	19.065	3	6.18E+01	0.00E+00	6.18E+01	3	2	2
860	18.868	18.997	4	3.19E+01	0.00E+00	3.19E+01	2	1	2
861	18.943	15.543	6	1.23E+01	0.00E+00	1.23E+01	2	1	1
862	18.900	15.398	2	2.03E+01	0.00E+00	2.03E+01	2	1	1
864	17.794	14.710	24	7.20E+01	0.00E+00	7.20E+01	4	3	2
865	18.790	15.396	2	5.22E+01	0.00E+00	5.22E+01	3	2	2
868	17.645	14.717	10	2.82E+01	0.00E+00	2.82E+01	2	1	2
870	18.683	15.404	4	8.69E+01	0.00E+00	8.69E+01	4	3	2
872	17.453	14.800	1	1.08E+00	0.00E+00	1.08E+00	1	1	1
873	18.898	15.544	4	2.12E+01	0.00E+00	2.12E+01	2	1	1
879	17.501	20.109	2	1.10E+00	0.00E+00	1.10E+00	1	1	1
882	19.020	13.167	2	1.78E+00	0.00E+00	1.78E+00	1	1	1
883	17.944	14.715	6	1.14E+02	0.00E+00	1.14E+02	5	4	3
885	17.712	14.726	1	4.60E+01	0.00E+00	4.60E+01	2	1	2
886	17.630	18.485	1	3.14E+01	0.00E+00	3.14E+01	2	1	2
887	18.486	15.329	3	1.36E+02	0.00E+00	1.36E+02	5	4	3
889	18.997	15.547	2	5.35E+00	0.00E+00	5.35E+00	2	1	1
890	18.440	15.406	2	1.43E+02	0.00E+00	1.43E+02	5	4	3
909	18.885	16.902	2	2.70E+01	0.00E+00	2.70E+01	2	1	2
911	17.490	16.998	2	4.20E+00	0.00E+00	4.20E+00	1	1	1
912	18.695	16.902	2	9.72E+01	0.00E+00	9.72E+01	4	3	2
913	17.539	17.001	2	1.06E+01	0.00E+00	1.06E+01	2	1	1
914	18.004	17.005	3	1.60E+02	0.00E+00	1.60E+02	6	5	3
915	17.953	16.928	3	1.47E+02	0.00E+00	1.47E+02	5	4	3
916	18.006	16.927	3	1.59E+02	0.00E+00	1.59E+02	6	5	3
917	18.056	16.923	3	1.67E+02	0.00E+00	1.67E+02	6	5	3
918	18.099	16.922	4	1.73E+02	0.00E+00	1.73E+02	6	5	3
919	17.894	16.929	2	1.30E+02	0.00E+00	1.30E+02	5	4	3
927	18.594	15.407	4	1.14E+02	0.00E+00	1.14E+02	5	4	3
933	18.637	15.415	4	1.02E+02	0.00E+00	1.02E+02	5	4	3
934	17.893	16.999	2	1.30E+02	0.00E+00	1.30E+02	5	4	3
935	18.196	17.004	3	1.81E+02	0.00E+00	1.81E+02	6	5	3
936	17.843	17.001	2	1.12E+02	0.00E+00	1.12E+02	5	4	3
949	18.996	16.900	2	5.74E+00	0.00E+00	5.74E+00	2	1	1
950	18.521	16.997	12	1.54E+02	0.00E+00	1.54E+02	6	5	3

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

951	18.949	16.902	2	1.19E+01	0.00E+00	1.19E+01	2	1	1
952	18.150	17.000	3	1.79E+02	0.00E+00	1.79E+02	6	5	3
953	18.055	17.000	3	1.68E+02	0.00E+00	1.68E+02	6	5	3
954	18.098	16.998	3	1.74E+02	0.00E+00	1.74E+02	6	5	3
955	18.498	16.900	4	1.57E+02	0.00E+00	1.57E+02	6	5	3
956	17.792	17.000	2	9.09E+01	0.00E+00	9.09E+01	4	3	2
957	17.746	16.997	2	7.18E+01	0.00E+00	7.18E+01	4	3	2
958	17.696	16.997	2	5.21E+01	0.00E+00	5.21E+01	3	2	2
959	18.643	16.902	9	1.16E+02	0.00E+00	1.16E+02	5	4	3
960	18.452	16.901	4	1.65E+02	0.00E+00	1.65E+02	6	5	3
961	18.400	16.901	1	1.71E+02	0.00E+00	1.71E+02	6	5	3
962	18.350	16.901	1	1.74E+02	0.00E+00	1.74E+02	6	5	3
963	18.299	16.903	1	1.77E+02	0.00E+00	1.77E+02	6	5	3
964	18.250	16.903	1	1.79E+02	0.00E+00	1.79E+02	6	5	3
965	18.196	16.903	1	1.80E+02	0.00E+00	1.80E+02	6	5	3
966	18.145	16.907	1	1.78E+02	0.00E+00	1.78E+02	6	5	3
967	17.841	16.917	1	1.10E+02	0.00E+00	1.10E+02	5	4	3
981	18.972	16.996	6	8.81E+00	0.00E+00	8.81E+00	2	1	1
984	18.538	16.909	2	1.49E+02	0.00E+00	1.49E+02	5	4	3
985	18.587	16.905	2	1.35E+02	0.00E+00	1.35E+02	5	4	3
986	17.597	17.004	1	2.22E+01	0.00E+00	2.22E+01	2	1	1
988	17.649	17.006	2	3.58E+01	0.00E+00	3.58E+01	2	1	2
992	18.792	16.910	6	5.91E+01	0.00E+00	5.91E+01	3	2	2
994	19.043	16.912	8	1.80E+00	0.00E+00	1.80E+00	1	1	1
996	19.096	16.911	7	1.21E-01	0.00E+00	1.21E-01	1	1	1
997	17.947	17.000	2	1.47E+02	0.00E+00	1.47E+02	5	4	3

Case 2a: Protected (Eye,
Respiratory Exposure)

720 rounds at aimpoint (18.25, 24.40)

767	17.905	18.470	4	5.02E-01	0.00E+00	5.02E-01	1	1	
770	18.800	19.002	2	1.05E+00	5.16E-01	1.05E+00	1	1	
771	18.674	18.999	7	2.13E+00	1.37E+02	2.13E+00	1	1	
772	18.736	18.998	8	7.45E-01	3.30E+01	7.45E-01	1	1	
773	18.870	19.061	6	2.98E-01	0.00E+00	2.98E-01	1	1	
775	18.651	19.059	8	3.15E+00	2.95E+01	3.15E+00	1	1	
804	18.624	18.999	3	1.88E+00	1.54E+02	1.88E+00	1	1	
823	17.948	18.476	2	2.42E-02	0.00E+00	2.42E-02	1	1	
832	18.739	19.068	4	6.30E-01	8.97E+01	6.30E-01	1	1	
852	17.775	18.473	40	6.87E-03	0.00E+00	6.87E-03	1	1	
858	18.573	19.060	12	2.04E+00	5.10E+01	2.04E+00	1	1	
859	18.800	19.065	3	1.41E+00	3.87E-01	1.41E+00	1	1	

Case 2b: Protected (Skin
Exposure)

720 rounds at aimpoint (18.25, 24.40)

38	18.902	18.161	2	2.67E+00	0.00E+00	2.67E+00			1
40	18.900	18.232	2	2.59E+00	0.00E+00	2.59E+00			1
42	18.948	18.195	2	1.53E-01	0.00E+00	1.53E-01			1
147	18.748	18.163	7	3.84E+01	0.00E+00	3.84E+01			2
154	18.999	18.190	3	9.51E-04	0.00E+00	9.51E-04			1
220	18.777	18.253	4	4.31E+01	0.00E+00	4.31E+01			2
282	17.696	17.960	2	2.57E+00	0.00E+00	2.57E+00			1
284	17.741	17.997	2	8.56E+00	0.00E+00	8.56E+00			1
285	17.693	18.039	2	2.33E+00	0.00E+00	2.33E+00			1
426	17.792	17.981	3	1.71E+01	0.00E+00	1.71E+01			1
524	18.297	18.033	2	5.46E+01	0.00E+00	5.46E+01			2
525	18.296	17.953	2	5.13E+01	0.00E+00	5.13E+01			2
526	18.347	17.998	2	5.86E+01	0.00E+00	5.86E+01			2
658	18.138	17.962	7	4.17E+01	0.00E+00	4.17E+01			2
675	18.397	17.990	3	4.42E+01	0.00E+00	4.42E+01			2
734	18.172	18.053	4	4.83E+01	0.00E+00	4.83E+01			2
761	17.998	18.471	4	5.58E+01	0.00E+00	5.58E+01			2
767	17.905	18.470	4	5.05E+01	0.00E+00	5.05E+01			2
770	18.800	19.002	2	3.97E+01	1.40E+01	5.97E+01			2
771	18.674	18.999	7	6.32E+01	5.25E+02	8.13E+02			6
772	18.736	18.998	8	3.33E+01	1.32E+02	2.22E+02			3
773	18.870	19.061	6	1.40E+01	6.26E+00	2.29E+01			1
775	18.651	19.059	8	5.44E+01	5.76E+02	8.77E+02			6

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

804	18.624	18.999	3	6.17E+01	1.11E+03	1.65E+03			7
823	17.948	18.476	2	4.19E+01	0.00E+00	4.19E+01			2
832	18.739	19.068	4	2.72E+01	3.44E+02	5.19E+02			5
852	17.775	18.473	40	1.77E+01	0.00E+00	1.77E+01			1
854	17.942	18.391	2	4.39E+01	0.00E+00	4.39E+01			2
855	17.799	18.399	5	1.75E+01	0.00E+00	1.75E+01			1
858	18.573	19.060	12	5.51E+01	6.64E+02	1.00E+03			6
859	18.800	19.065	3	3.46E+01	2.60E+01	7.17E+01			2
860	18.868	18.997	4	1.73E+01	2.94E-01	1.77E+01			1
909	18.885	16.902	2	8.58E-02	0.00E+00	8.58E-02			1
912	18.695	16.902	2	5.51E-01	0.00E+00	5.51E-01			1
914	18.004	17.005	3	4.63E-01	0.00E+00	4.63E-01			1
915	17.953	16.928	3	8.52E-02	0.00E+00	8.52E-02			1
916	18.006	16.927	3	2.94E-01	0.00E+00	2.94E-01			1
917	18.056	16.923	3	8.70E-01	0.00E+00	8.70E-01			1
918	18.099	16.922	4	1.50E+00	0.00E+00	1.50E+00			1
919	17.894	16.929	2	1.09E-01	0.00E+00	1.09E-01			1
934	17.893	16.999	2	1.69E-01	0.00E+00	1.69E-01			1
935	18.196	17.004	3	5.40E+00	0.00E+00	5.40E+00			1
936	17.843	17.001	2	1.82E-01	0.00E+00	1.82E-01			1
949	18.996	16.900	2	1.48E-04	0.00E+00	1.48E-04			1
950	18.521	16.997	12	2.88E+00	0.00E+00	2.88E+00			1
951	18.949	16.902	2	2.70E-03	0.00E+00	2.70E-03			1
952	18.150	17.000	3	3.87E+00	0.00E+00	3.87E+00			1
953	18.055	17.000	3	1.38E+00	0.00E+00	1.38E+00			1
954	18.098	16.998	3	2.37E+00	0.00E+00	2.37E+00			1
955	18.498	16.900	4	1.64E+00	0.00E+00	1.64E+00			1
956	17.792	17.000	2	9.94E-02	0.00E+00	9.94E-02			1
957	17.746	16.997	2	3.24E-02	0.00E+00	3.24E-02			1
958	17.696	16.997	2	2.03E-03	0.00E+00	2.03E-03			1
959	18.643	16.902	9	7.35E-01	0.00E+00	7.35E-01			1
960	18.452	16.901	4	1.04E+00	0.00E+00	1.04E+00			1
961	18.400	16.901	1	1.54E+00	0.00E+00	1.54E+00			1
962	18.350	16.901	1	3.39E+00	0.00E+00	3.39E+00			1
963	18.299	16.903	1	4.26E+00	0.00E+00	4.26E+00			1
964	18.250	16.903	1	3.67E+00	0.00E+00	3.67E+00			1
965	18.196	16.903	1	2.90E+00	0.00E+00	2.90E+00			1
966	18.145	16.907	1	2.08E+00	0.00E+00	2.08E+00			1
967	17.841	16.917	1	9.65E-02	0.00E+00	9.65E-02			1
981	18.972	16.996	6	2.03E-03	0.00E+00	2.03E-03			1
984	18.538	16.909	2	1.79E+00	0.00E+00	1.79E+00			1
985	18.587	16.905	2	1.22E+00	0.00E+00	1.22E+00			1
992	18.792	16.910	6	4.24E-01	0.00E+00	4.24E-01			1
997	17.947	17.000	2	1.22E-01	0.00E+00	1.22E-01			1

Mustard (HD) 250kg Bomb
Light Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (20.40, 33.65)									
67	20.501	33.135	1	1.75E+00	2.52E+01	3.78E+01	1	1	2
68	20.561	33.131	1	1.19E+01	1.03E+02	1.59E+02	2	1	3
69	20.605	33.207	2	1.00E+00	1.66E+01	2.47E+01	1	1	1
117	20.256	33.206	3	5.18E+00	5.06E+01	7.75E+01	2	1	2
118	20.349	33.200	3	1.85E+00	2.60E+01	3.90E+01	1	1	2
134	20.300	33.198	4	8.10E+01	2.58E+02	4.50E+02	4	3	4
136	20.211	33.205	4	1.86E-04	4.13E-01	5.90E-01	1	1	1
165	20.395	33.192	4	8.96E-05	2.44E-01	3.49E-01	1	1	1
168	20.555	33.205	2	8.61E+01	2.58E+02	4.55E+02	4	3	4

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Case 2a: Protected (Eye,
Respiratory Exposure)

172	20.494	33.196	4	9.82E-01	1.66E+01	2.47E+01	1	1	1
180	20.316	33.264	16	2.03E+02	3.46E+02	6.97E+02	6	5	5
183	20.524	33.279	16	4.73E+01	2.30E+02	3.76E+02	2	1	4

2 rounds at aimpoint (20.40, 33.65)

67	20.501	33.135	1	5.62E-03	8.65E+00	5.62E-03	1	1	
68	20.561	33.131	1	3.23E-01	5.68E+01	3.23E-01	1	1	
69	20.605	33.207	2	8.12E-05	3.88E+00	8.12E-05	1	1	
117	20.256	33.206	3	7.90E-02	2.02E+01	7.90E-02	1	1	
118	20.349	33.200	3	1.23E-02	7.61E+00	1.23E-02	1	1	
134	20.300	33.198	4	2.27E+00	1.56E+02	2.27E+00	1	1	
136	20.211	33.205	4	0.00E+00	3.03E-02	0.00E+00	1	1	
165	20.395	33.192	4	0.00E+00	2.39E-02	0.00E+00	1	1	
168	20.555	33.205	2	2.17E+00	1.48E+02	2.17E+00	1	1	
172	20.494	33.196	4	6.98E-05	4.07E+00	6.98E-05	1	1	
180	20.316	33.264	16	3.37E+00	1.90E+02	3.37E+00	1	1	
183	20.524	33.279	16	4.68E-01	9.46E+01	4.68E-01	1	1	

Case 2b: Protected (Skin
Exposure)

2 rounds at aimpoint (20.40, 33.65)

67	20.501	33.135	1	3.74E-01	2.47E+01	3.57E+01			2
68	20.561	33.131	1	6.18E+00	1.62E+02	2.38E+02			3
69	20.605	33.207	2	9.65E-02	1.11E+01	1.60E+01			1
117	20.256	33.206	3	1.90E+00	5.79E+01	8.46E+01			2
118	20.349	33.200	3	3.71E-01	2.18E+01	3.15E+01			2
134	20.300	33.198	4	6.63E+01	4.46E+02	7.03E+02			5
136	20.211	33.205	4	1.57E-05	8.66E-02	1.24E-01			1
165	20.395	33.192	4	9.81E-06	6.83E-02	9.76E-02			1
168	20.555	33.205	2	6.24E+01	4.24E+02	6.68E+02			5
172	20.494	33.196	4	9.40E-02	1.16E+01	1.67E+01			1
180	20.316	33.264	16	6.56E+01	5.42E+02	8.40E+02			6
183	20.524	33.279	16	9.77E+00	2.70E+02	3.95E+02			4

Mustard (HD) 250kg Bomb
Moderate Attack
Height of Release: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S

12 rounds at aimpoint (20.55, 33.75)

67	20.501	33.135	1	1.50E+01	1.15E+02	1.79E+02	2	1	3
68	20.561	33.131	1	9.52E+00	7.55E+01	1.17E+02	2	1	3
69	20.605	33.207	2	5.92E+01	2.28E+02	3.85E+02	3	2	4
115	20.711	33.203	2	4.08E+01	2.01E+02	3.28E+02	2	1	4
117	20.256	33.206	3	1.09E-04	1.10E+00	1.57E+00	1	1	1
118	20.349	33.200	3	9.81E+00	8.17E+01	1.27E+02	2	1	3
119	20.658	33.204	2	1.59E+01	1.24E+02	1.93E+02	2	1	3
121	20.757	33.205	2	1.66E+01	1.23E+02	1.92E+02	2	1	3
134	20.300	33.198	4	1.24E+00	1.74E+01	2.61E+01	1	1	2
165	20.395	33.192	4	3.52E+01	1.97E+02	3.17E+02	2	1	4
168	20.555	33.205	2	1.58E+01	1.18E+02	1.84E+02	2	1	3
172	20.494	33.196	4	3.62E+01	1.96E+02	3.16E+02	2	1	4
174	20.901	33.191	1	3.46E+01	1.87E+02	3.02E+02	2	1	4
175	20.950	33.190	1	1.40E+00	1.91E+01	2.87E+01	1	1	2
176	20.850	33.193	1	1.16E+01	9.96E+01	1.54E+02	2	1	3
177	20.993	33.189	1	1.33E-04	4.01E-01	5.73E-01	1	1	1
178	20.801	33.194	1	3.91E+01	2.09E+02	3.38E+02	2	1	4
179	20.448	33.195	4	1.32E+01	1.04E+02	1.62E+02	2	1	3
180	20.316	33.264	16	5.89E+00	5.55E+01	8.52E+01	2	1	2
181	20.923	33.281	16	8.33E+01	2.27E+02	4.08E+02	4	3	4
182	20.725	33.278	16	5.04E+01	2.81E+02	4.52E+02	3	2	4
183	20.524	33.279	16	7.27E+01	2.94E+02	4.93E+02	4	3	4

12 rounds at aimpoint (20.55, 33.60)

67	20.501	33.135	1	3.06E+00	1.98E+02	3.06E+00	1	1	
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Case 2a: Protected (Eye,
Respiratory Exposure)

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

68	20.561	33.131	1	7.38E-01	7.45E+01	7.38E-01	1	1	
69	20.605	33.207	2	1.17E+01	4.50E+02	1.17E+01	2	1	
115	20.711	33.203	2	8.08E+00	3.36E+02	8.08E+00	2	1	
117	20.256	33.206	3	0.00E+00	2.11E-02	0.00E+00	1	1	
118	20.349	33.200	3	1.35E+00	1.15E+02	1.35E+00	1	1	
119	20.658	33.204	2	1.29E+00	1.31E+02	1.29E+00	1	1	
121	20.757	33.205	2	1.33E+00	1.31E+02	1.33E+00	1	1	
134	20.300	33.198	4	8.51E-05	4.85E+00	8.51E-05	1	1	
165	20.395	33.192	4	9.43E+00	3.65E+02	9.43E+00	2	1	
168	20.555	33.205	2	1.47E+00	1.32E+02	1.47E+00	1	1	
172	20.494	33.196	4	9.59E+00	3.71E+02	9.59E+00	2	1	
174	20.901	33.191	1	1.08E+01	3.99E+02	1.08E+01	2	1	
175	20.950	33.190	1	1.80E-04	1.11E+00	1.80E-04	1	1	
176	20.850	33.193	1	1.34E+00	1.09E+02	1.34E+00	1	1	
178	20.801	33.194	1	1.14E+01	4.24E+02	1.14E+01	2	1	
179	20.448	33.195	4	1.33E+00	1.15E+02	1.33E+00	1	1	
180	20.316	33.264	16	2.60E-01	5.03E+01	2.60E-01	1	1	
181	20.923	33.281	16	2.32E+00	2.03E+02	2.32E+00	1	1	
182	20.725	33.278	16	8.64E-01	1.72E+02	8.64E-01	1	1	
183	20.524	33.279	16	1.83E+00	2.23E+02	1.83E+00	1	1	

Case 2b: Protected (Skin Exposure)

12 rounds at aimpoint (20.55, 33.60)									
67	20.501	33.135	1	9.22E+01	5.66E+02	9.01E+02			6
68	20.561	33.131	1	9.69E+00	2.13E+02	3.14E+02			4
69	20.605	33.207	2	1.72E+02	1.29E+03	2.01E+03			7
115	20.711	33.203	2	1.22E+02	9.62E+02	1.50E+03			6
117	20.256	33.206	3	1.44E-05	6.05E-02	8.64E-02			1
118	20.349	33.200	3	3.95E+01	3.28E+02	5.08E+02			5
119	20.658	33.204	2	3.62E+01	3.74E+02	5.70E+02			5
121	20.757	33.205	2	3.86E+01	3.74E+02	5.73E+02			5
134	20.300	33.198	4	1.89E-01	1.39E+01	2.00E+01			1
165	20.395	33.192	4	1.54E+02	1.04E+03	1.64E+03			7
168	20.555	33.205	2	4.14E+01	3.78E+02	5.81E+02			5
172	20.494	33.196	4	1.51E+02	1.06E+03	1.67E+03			7
174	20.901	33.191	1	1.80E+02	1.14E+03	1.81E+03			7
175	20.950	33.190	1	1.28E-02	3.18E+00	4.56E+00			1
176	20.850	33.193	1	3.51E+01	3.12E+02	4.81E+02			4
178	20.801	33.194	1	1.85E+02	1.21E+03	1.91E+03			7
179	20.448	33.195	4	3.47E+01	3.29E+02	5.05E+02			5
180	20.316	33.264	16	7.24E+00	1.44E+02	2.13E+02			3
181	20.923	33.281	16	2.52E+01	5.81E+02	8.55E+02			6
182	20.725	33.278	16	1.70E+01	4.92E+02	7.20E+02			5
183	20.524	33.279	16	2.67E+01	6.38E+02	9.38E+02			6

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (20.55, 33.85)									
67	20.501	33.135	1	6.43E+02	3.71E+02	1.17E+03	6	6	6
68	20.561	33.131	1	1.08E+02	1.95E+02	3.87E+02	5	4	4
69	20.605	33.207	2	9.36E+02	7.96E+02	2.07E+03	6	6	7
115	20.711	33.203	2	7.06E+02	6.48E+02	1.63E+03	6	6	7
117	20.256	33.206	3	1.24E-01	1.63E+00	2.45E+00	1	1	1
118	20.349	33.200	3	3.47E+02	2.26E+02	6.70E+02	6	6	5
119	20.658	33.204	2	3.61E+02	3.17E+02	8.14E+02	6	6	6
121	20.757	33.205	2	3.80E+02	3.14E+02	8.29E+02	6	6	6
134	20.300	33.198	4	6.69E+00	3.03E+01	5.00E+01	2	1	2
165	20.395	33.192	4	8.31E+02	6.55E+02	1.77E+03	6	6	7
168	20.555	33.205	2	3.88E+02	3.04E+02	8.22E+02	6	6	6

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

172	20.494	33.196	4	8.16E+02	6.70E+02	1.77E+03	6	6	7
174	20.901	33.191	1	9.64E+02	6.92E+02	1.95E+03	6	6	7
175	20.950	33.190	1	5.32E+00	2.47E+01	4.06E+01	2	1	2
176	20.850	33.193	1	3.56E+02	2.47E+02	7.09E+02	6	6	5
177	20.993	33.189	1	5.21E-03	1.18E+00	1.69E+00	1	1	1
178	20.801	33.194	1	9.90E+02	7.44E+02	2.05E+03	6	6	7
179	20.448	33.195	4	3.37E+02	2.63E+02	7.13E+02	6	6	5
180	20.316	33.264	16	1.09E+02	1.50E+02	3.23E+02	5	4	4
181	20.923	33.281	16	2.81E+02	5.40E+02	1.05E+03	6	6	6
182	20.725	33.278	16	2.88E+02	6.16E+02	1.17E+03	6	6	6
183	20.524	33.279	16	3.55E+02	7.08E+02	1.37E+03	6	6	6

Case 2a: Protected (Eye,
Respiratory Exposure)

24 rounds at aimpoint (20.55, 33.90)									
67	20.501	33.135	1	2.30E+00	7.18E+01	2.30E+00	1	1	
68	20.561	33.131	1	2.13E+00	4.41E+01	2.13E+00	1	1	
69	20.605	33.207	2	3.12E+00	1.49E+02	3.12E+00	1	1	
115	20.711	33.203	2	2.69E+00	1.26E+02	2.69E+00	1	1	
117	20.256	33.206	3	0.00E+00	7.16E-01	0.00E+00	1	1	
118	20.349	33.200	3	1.94E+00	4.88E+01	1.94E+00	1	1	
119	20.658	33.204	2	2.14E+00	7.23E+01	2.14E+00	1	1	
121	20.757	33.205	2	2.09E+00	7.11E+01	2.09E+00	1	1	
134	20.300	33.198	4	1.52E-01	9.47E+00	1.52E-01	1	1	
136	20.211	33.205	4	0.00E+00	2.14E-02	0.00E+00	1	1	
165	20.395	33.192	4	2.72E+00	1.24E+02	2.72E+00	1	1	
168	20.555	33.205	2	2.08E+00	6.94E+01	2.08E+00	1	1	
172	20.494	33.196	4	2.60E+00	1.27E+02	2.60E+00	1	1	
174	20.901	33.191	1	2.54E+00	1.23E+02	2.54E+00	1	1	
175	20.950	33.190	1	9.91E-02	8.90E+00	9.91E-02	1	1	
176	20.850	33.193	1	2.02E+00	5.59E+01	2.02E+00	1	1	
177	20.993	33.189	1	0.00E+00	4.83E-01	0.00E+00	1	1	
178	20.801	33.194	1	2.94E+00	1.36E+02	2.94E+00	1	1	
179	20.448	33.195	4	2.09E+00	6.10E+01	2.09E+00	1	1	
180	20.316	33.264	16	6.96E-01	3.43E+01	6.96E-01	1	1	
181	20.923	33.281	16	1.74E+00	1.30E+02	1.74E+00	1	1	
182	20.725	33.278	16	2.08E+00	1.60E+02	2.08E+00	1	1	
183	20.524	33.279	16	2.23E+00	1.74E+02	2.23E+00	1	1	

Case 2b: Protected (Skin
Exposure)

24 rounds at aimpoint (20.55, 33.90)									
67	20.501	33.135	1	2.49E+01	2.05E+02	3.18E+02			4
68	20.561	33.131	1	1.11E+01	1.26E+02	1.91E+02			3
69	20.605	33.207	2	7.51E+01	4.26E+02	6.84E+02			5
115	20.711	33.203	2	5.66E+01	3.61E+02	5.72E+02			5
117	20.256	33.206	3	3.93E-05	2.05E+00	2.93E+00			1
118	20.349	33.200	3	1.20E+01	1.40E+02	2.12E+02			3
119	20.658	33.204	2	1.76E+01	2.07E+02	3.13E+02			4
121	20.757	33.205	2	1.78E+01	2.03E+02	3.08E+02			4
134	20.300	33.198	4	9.21E-01	2.71E+01	3.96E+01			2
136	20.211	33.205	4	0.00E+00	6.12E-02	8.74E-02			1
165	20.395	33.192	4	5.91E+01	3.54E+02	5.65E+02			5
168	20.555	33.205	2	1.65E+01	1.99E+02	3.01E+02			4
172	20.494	33.196	4	6.08E+01	3.64E+02	5.81E+02			5
174	20.901	33.191	1	6.62E+01	3.52E+02	5.69E+02			5
175	20.950	33.190	1	8.05E-01	2.55E+01	3.72E+01			2
176	20.850	33.193	1	1.34E+01	1.60E+02	2.42E+02			3
177	20.993	33.189	1	6.94E-05	1.38E+00	1.97E+00			1
178	20.801	33.194	1	7.12E+01	3.89E+02	6.27E+02			5
179	20.448	33.195	4	1.39E+01	1.74E+02	2.62E+02			4
180	20.316	33.264	16	6.30E+00	9.81E+01	1.46E+02			3
181	20.923	33.281	16	3.14E+01	3.71E+02	5.61E+02			5
182	20.725	33.278	16	3.15E+01	4.57E+02	6.84E+02			5
183	20.524	33.279	16	3.66E+01	4.97E+02	7.47E+02			5

Mustard (HD) 250kg TBM
Light Attack

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Height of Release: 500m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (20.40, 33.80)									
67	20.501	33.135	1	1.09E+01	2.65E+01	4.88E+01	2	1	2
68	20.561	33.131	1	3.33E+00	7.46E+00	1.40E+01	1	1	1
69	20.605	33.207	2	7.66E-01	3.08E+00	5.17E+00	1	1	1
117	20.256	33.206	3	6.37E+00	1.88E+01	3.32E+01	2	1	2
118	20.349	33.200	3	3.70E+01	1.07E+02	1.90E+02	2	1	3
119	20.658	33.204	2	0.00E+00	3.26E-01	4.66E-01	1	1	1
120	20.161	33.203	3	1.41E-04	7.98E-01	1.14E+00	1	1	1
134	20.300	33.198	4	1.71E+01	4.90E+01	8.71E+01	2	1	2
136	20.211	33.205	4	1.59E+00	5.01E+00	8.75E+00	1	1	1
165	20.395	33.192	4	4.44E+01	1.28E+02	2.27E+02	2	1	3
168	20.555	33.205	2	5.17E+00	1.46E+01	2.60E+01	2	1	2
172	20.494	33.196	4	1.99E+01	5.63E+01	1.00E+02	2	1	3
179	20.448	33.195	4	3.75E+01	1.06E+02	1.89E+02	2	1	3
180	20.316	33.264	16	3.67E+01	1.09E+02	1.92E+02	2	1	3
183	20.524	33.279	16	1.35E+01	4.14E+01	7.26E+01	2	1	2

Case 2a: Protected (Eye, Respiratory Exposure)
Case 2b: Protected (Skin Exposure)

1 round at aimpoint (20.30, 33.45)									
180	20.316	33.264	16	0.00E+00	8.47E-01	0.00E+00	1	1	
1 round at aimpoint (20.30, 33.45)									
117	20.256	33.206	3	5.25E-02	2.18E+02	3.11E+02			4
118	20.349	33.200	3	1.16E-02	9.43E+01	1.35E+02			3
134	20.300	33.198	4	1.55E+00	2.11E+03	3.02E+03			7
136	20.211	33.205	4	0.00E+00	8.13E-01	1.16E+00			1
165	20.395	33.192	4	0.00E+00	5.34E-01	7.63E-01			1
180	20.316	33.264	16	1.17E+00	1.36E+03	1.94E+03			7

Mustard (HD) 500kg TBM

Moderate Attack

Height of Release: 800m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg/man)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (20.50, 34.10)									
67	20.501	33.135	1	5.53E-04	9.08E-01	1.30E+00	1	1	1
68	20.561	33.131	1	5.01E-01	2.09E+00	3.49E+00	1	1	1
69	20.605	33.207	2	1.33E+00	4.04E+00	7.10E+00	1	1	1
115	20.711	33.203	2	7.29E+01	1.65E+02	3.09E+02	4	3	4
116	20.063	33.201	3	1.21E+01	2.73E+01	5.11E+01	2	1	2
117	20.256	33.206	3	2.82E+01	6.76E+01	1.25E+02	2	1	3
118	20.349	33.200	3	1.22E+01	2.74E+01	5.13E+01	2	1	2
119	20.658	33.204	2	1.22E+01	3.24E+01	5.85E+01	2	1	2
120	20.161	33.203	3	2.72E+01	6.54E+01	1.21E+02	2	1	3
121	20.757	33.205	2	2.02E+02	4.42E+02	8.33E+02	6	5	6
133	20.115	33.201	4	2.02E+01	4.76E+01	8.82E+01	2	1	2
134	20.300	33.198	4	2.04E+01	4.64E+01	8.67E+01	2	1	2
135	20.012	33.206	4	5.87E+00	1.32E+01	2.47E+01	2	1	1
136	20.211	33.205	4	3.08E+01	7.42E+01	1.37E+02	2	1	3
165	20.395	33.192	4	5.78E+00	1.31E+01	2.45E+01	2	1	1
168	20.555	33.205	2	8.63E-02	5.61E-01	8.88E-01	1	1	1
172	20.494	33.196	4	2.30E-01	1.78E+00	2.77E+00	1	1	1
174	20.901	33.191	1	1.97E+02	4.27E+02	8.07E+02	6	5	6
175	20.950	33.190	1	5.44E+01	1.33E+02	2.44E+02	3	2	3
176	20.850	33.193	1	3.73E+02	8.08E+02	1.53E+03	6	6	7
177	20.993	33.189	1	1.51E+01	4.20E+01	7.51E+01	2	1	2
178	20.801	33.194	1	3.55E+02	7.72E+02	1.46E+03	6	6	6
179	20.448	33.195	4	2.04E+00	4.83E+00	8.94E+00	1	1	1

Table A5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalions, Movement to Contact

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

180	20.316	33.264	16	2.68E+01	6.99E+01	1.27E+02	2	1	3
181	20.923	33.281	16	1.36E+02	2.92E+02	5.53E+02	5	4	5
182	20.725	33.278	16	1.03E+02	2.27E+02	4.27E+02	5	4	4
183	20.524	33.279	16	2.08E-01	1.11E+00	1.79E+00	1	1	1
2 rounds at aimpoint (6.30, 44.15)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
2 rounds at aimpoint (6.30, 44.15)									
298	5.906	44.006	4	0.00E+00	5.29E-01	7.56E-01			1
299	6.003	44.003	9	9.48E-01	1.49E+03	2.13E+03			7
466	6.639	43.834	4	0.00E+00	3.90E-02	5.57E-02			1

Mustard (HD) 500kg TBM
Heavy Attack
Height of Release: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
E	R	S							
4 rounds at aimpoint (20.50, 34.05)									
67	20.501	33.135	1	9.49E+00	1.53E+01	3.13E+01	2	1	2
68	20.561	33.131	1	4.59E+02	8.08E+02	1.61E+03	6	6	7
69	20.605	33.207	2	8.00E+02	2.29E+03	4.07E+03	6	6	8
115	20.711	33.203	2	5.59E+02	1.08E+03	2.10E+03	6	6	7
116	20.063	33.201	3	1.59E+01	4.06E+01	7.39E+01	2	1	2
117	20.256	33.206	3	4.17E+01	1.06E+02	1.93E+02	2	1	3
118	20.349	33.200	3	1.60E+01	4.08E+01	7.43E+01	2	1	2
119	20.658	33.204	2	2.85E+02	5.03E+02	1.00E+03	6	6	6
120	20.161	33.203	3	4.14E+01	1.04E+02	1.90E+02	2	1	3
121	20.757	33.205	2	8.85E+02	1.60E+03	3.17E+03	6	6	7
133	20.115	33.201	4	2.88E+01	7.39E+01	1.34E+02	2	1	3
134	20.300	33.198	4	2.85E+01	7.22E+01	1.32E+02	2	1	3
135	20.012	33.206	4	7.33E+00	1.84E+01	3.36E+01	2	1	2
136	20.211	33.205	4	4.78E+01	1.18E+02	2.16E+02	2	1	3
165	20.395	33.192	4	7.88E+00	1.88E+01	3.47E+01	2	1	2
168	20.555	33.205	2	1.66E+02	3.17E+02	6.19E+02	6	5	5
172	20.494	33.196	4	1.85E+00	2.80E+00	5.85E+00	1	1	1
174	20.901	33.191	1	2.31E+02	4.88E+02	9.28E+02	6	5	6
175	20.950	33.190	1	5.00E+01	1.16E+02	2.16E+02	3	2	3
176	20.850	33.193	1	5.65E+02	1.18E+03	2.25E+03	6	6	7
177	20.993	33.189	1	1.20E+01	3.16E+01	5.71E+01	2	1	2
178	20.801	33.194	1	8.71E+02	1.59E+03	3.14E+03	6	6	7
179	20.448	33.195	4	2.95E+00	6.44E+00	1.22E+01	1	1	1
180	20.316	33.264	16	3.55E+01	9.71E+01	1.74E+02	2	1	3
181	20.923	33.281	16	1.20E+02	2.55E+02	4.84E+02	5	4	4
182	20.725	33.278	16	8.88E+02	1.48E+03	3.00E+03	6	6	7
183	20.524	33.279	16	1.40E+01	4.16E+00	1.99E+01	2	1	1
4 rounds at aimpoint (6.10, 44.15)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
4 rounds at aimpoint (6.10, 44.15)									
294	5.866	43.890	3	0.00E+00	1.98E+01	2.83E+01			2
297	5.797	44.006	9	9.39E-01	1.48E+03	2.12E+03			7
450	6.473	43.754	2	3.22E-05	1.89E+01	2.70E+01			2

APPENDIX B

HEAVY BRIGADE, BRIGADE SUPPORT AREA, MOVEMENT TO CONTACT

Appendix B. Heavy Brigade, Brigade Support Area, Movement to Contact

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Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Bde HQ	HHC		Cmd Sec	Tac CP	1 M113	* 829	6+2	Fwd	Tank Bn Task Force
				Main CP	2 HMMWV	807	1	Bde HHC	BSA Task Force
						808	1	Bde HHC	BSA Task Force
			S-1 Sec	Rear CP	2 HMMWV	747	3	FSB	BSA Task Force
						759	4	FSB	BSA Task Force
			S-2 Sec	Main CP	1 M557	819	4	Bde HHC	BSA Task Force
					2 HMMWV	748	3	Bde HHC	BSA Task Force
						749	3	Bde HHC	BSA Task Force
			S-3 Sec	Tac CP	1 M577	* 822	4+2+2	Fwd	Tank Bn Task Force
				Main CP	2 M577	817	5	Bde HHC	BSA Task Force
						818	5	Bde HHC	BSA Task Force
					3 HMMWV	750	2	Bde HHC	BSA Task Force
						751	2	Bde HHC	BSA Task Force
						752	2	Bde HHC	BSA Task Force
			Bde FSE Sec (Carried on Arty Bn TOE)		1 HMMWV	753	2	Bde HHC	BSA Task Force
					1 M577	821	2	Bde HHC	BSA Task Force
			Tac CP Sec	TAC CP	2 riding in APC in S-3 Sec				BSA Task Force
				Main CP	1 HMMWV	754	2	Bde HHC	BSA Task Force
			Bde Eng Sec	Main CP (Carried on Eng Bn TOE)	1 M577	820	4	Bde HHC	BSA Task Force
			Bde AD Sec	Main CP (Carried on AD Bn TOE)	1 HMMWV	758	3	Bde HHC	BSA Task Force
			Fast Sec	Rear CP (Carried on MI Bn TOE)	1 HMMWV	809	2	FSB	BSA Task Force
			S-4 Sec	Main CP	1 HMMWV	769	2	Bde HHC	BSA Task Force
				Rear CP	1 M577	812	5	FSB	BSA Task Force
			Co HQ	Main CP	1 HMMWV	756	2	Bde HHC	BSA Task Force
				Rear CP	1 HMMWV	755	2	FSB	BSA Task Force
					1 Truck	874	3	FSB	BSA Task Force
			Commo Sec	Main CP	3HMMWV	757	4	Bde HHC	BSA Task Force
						779	3	Bde HHC	BSA Task Force
						796	2	Bde HHC	BSA Task Force
				Rear CP	1 HMMWV	797	1	Bde HHC	BSA Task Force
				Main CP	1 M577	811	3	FSB	BSA Task Force
			Maint Sec	Main CP	1 M578	884	3	FSB	BSA Task Force
					4 M88A1	824	3	FSB	BSA Task Force
						825	3	FSB	BSA Task Force
						826	3	FSB	BSA Task Force
						827	3	FSB	BSA Task Force
				Rear CP	2 Truck	876	4	FSB	BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Mech Inf Bn 1	HHC		Mess Sec		1 Truck	875	5	FSB	BSA Task Force
		Bn HQ Sec	Tac CP	1 M2	* 336	5	Fwd	Mech Inf Bn 1 Task Force	
			Main CP	2 HMMWV	* 261	2	Bn HHC	Mech Inf Bn 1 Task Force	
						* 262	1	Bn HHC	Mech Inf Bn 1 Task Force
		S-1 Sec		1 HMMWV	* 269	5	Cbt Train	Mech Inf Bn 1 Task Force	
				1 Truck	416	4	Fld Train	BSA Task Force	
		S-2 Sec							
		S-3 Sec	Tac CP	1 riding in APC in S-3 Sec				Mech Inf Bn 1 Task Force	
			Main CP	1 M577	* 345	4	Bn HHC	Mech Inf Bn 1 Task Force	
			Main CP	1 M2	* 337	3	Fwd	Mech Inf Bn 1 Task Force	
				1 M113	* 374	1+1+2	Fwd	Mech Inf Bn 1 Task Force	
				1 M577	* 344	6	Bn HHC	Mech Inf Bn 1 Task Force	
				3 HMMWV	* 263	2	Bn HHC	Mech Inf Bn 1 Task Force	
					* 264	2	Bn HHC	Mech Inf Bn 1 Task Force	
					* 270	2	Bn HHC	Mech Inf Bn 1 Task Force	
		FSE Sec (Carried on Arty Bn TOE)		1 HMMWV	* 803	2	Bn HHC	Mech Inf Bn 2 Task Force	
				1 Colt	* 838	2	Bn HHC	Mech Inf Bn 1 Task Force	
		Tac CP Sec							
			Tac CP	2 riding in APC in S-3 Sec					
			Main CP	1 HMMWV	* 265	2	Bn HHC	Mech Inf Bn 1 Task Force	
		S-4 Sec							
			Cbt Trns CP	1 M577	* 351	2	Cbt Train	Mech Inf Bn 1 Task Force	
				1 HMMWV	* 267	2	Cbt Train	Mech Inf Bn 1 Task Force	
				2 ride in spt plt veh/HMMWV of HQ Sec					
		Co HQ	Fld Trns CP						
			Main CP	1 HMMWV	* 268	2	Bn HHC	Mech Inf Bn 1 Task Force	
				1 HMMWV	276	2	Fld Train	BSA Task Force	
			Fld Trns CP		415	2	Fld Train	BSA Task Force	
				2 Truck	441	1	Fld Train	BSA Task Force	
		Bn Commo Plt		Main CP	2 HMMWV	* 271	2	Bn HHC	Mech Inf Bn 1 Task Force
						* 266	2	Bn HHC	Mech Inf Bn 1 Task Force
				Cbt Trns CP	1 M577	* 350	3	Cbt Train	Mech Inf Bn 1 Task Force
					1 HMMWV	* 272	1	Cbt Train	Mech Inf Bn 1 Task Force
					3 CYCLE	* 291	1	Cbt Train	Mech Inf Bn 1 Task Force
						* 292	1	Cbt Train	Mech Inf Bn 1 Task Force
						* 293	1	Cbt Train	Mech Inf Bn 1 Task Force
		Bn Scout Plt	HQ Sec						
					2 M3	* 338	5	Fwd	Mech Inf Bn 1 Task Force
			Scout Sec			* 341	5	Fwd	Mech Inf Bn 1 Task Force
4 M3	* 342				5	Fwd	Mech Inf Bn 1 Task Force		
	* 343				5	Fwd	Mech Inf Bn 1 Task Force		
	* 339				5	Fwd	Mech Inf Bn 1 Task Force		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
						* 340	5	Fwd	Mech Inf Bn 1 Task Force
		Hvy Mort Plt							
			Mort Plt HQ		2 HMMWV	* 259	2	Bn Rear	Mech Inf Bn 1 Task Force
						* 260	1	Bn Rear	Mech Inf Bn 1 Task Force
			Mort Sec HQ		2 M577	* 346	3	Bn Rear	Mech Inf Bn 1 Task Force
						* 347	3	Bn Rear	Mech Inf Bn 1 Task Force
				6 Mortar Sqds	6 4.2 MTR	* 460	4	Bn Rear	Mech Inf Bn 1 Task Force
						* 461	4	Bn Rear	Mech Inf Bn 1 Task Force
						* 462	4	Bn Rear	Mech Inf Bn 1 Task Force
						* 463	4	Bn Rear	Mech Inf Bn 1 Task Force
						* 464	4	Bn Rear	Mech Inf Bn 1 Task Force
						* 465	4	Bn Rear	Mech Inf Bn 1 Task Force
		Bn Med Plt							
			Plt HQ		1 HMMWV	* 273	2	Cbt Train	Mech Inf Bn 1 Task Force
			Aid Station		2 Trucks (2 in 1 icon)	* 442	2	Cbt Train	Mech Inf Bn 1 Task Force
					2 M577-AMB	* 488	4	Cbt Train	Mech Inf Bn 1 Task Force
						* 489	3	Cbt Train	Mech Inf Bn 1 Task Force
			Evac Sec		1 M577-AMB	* 490	3	Cbt Train	Mech Inf Bn 1 Task Force
					7 M113-AMB (7 in 1 icon)	* 491	14	Cbt Train	Mech Inf Bn 1 Task Force
		Bn Sprt Plt							
			HQ Sec		1 HMMWV	288	3+2	Fld Train	BSA Task Force
			Trns Sec		4 Trucks (4 in 1 icon)	434	4	Fld Train	BSA Task Force
					5 HEMMT C (5 in 1 icon)	484	5	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	486	4	Fld Train	BSA Task Force
				Class III & V Team	8 HEMMT C (4 in 1 icon)	482	8	Fld Train	BSA Task Force
						483	4	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	485	4	Fld Train	BSA Task Force
			Mess Sec		1 Truck	435	2	Fld Train	BSA Task Force
					4 Trucks (4 in 1 icon)	433	12	Fld Train	BSA Task Force
			Plt HQ		2 HMMWV	* 275	1	Maint	Mech Inf Bn 1 Task Force
						* 277	1	Maint	Mech Inf Bn 1 Task Force
			Admin Sec		1 HMMWV	274	1	Fld Train	BSA Task Force
					7 Trucks	437	1	Fld Train	BSA Task Force
						428	1	Fld Train	BSA Task Force
						417	1	Fld Train	BSA Task Force
						* 436	1	Maint	Mech Inf Bn 1 Task Force
						* 438	1	Maint	Mech Inf Bn 1 Task Force
						* 439	1	Maint	Mech Inf Bn 1 Task Force
						* 440	2	Maint	Mech Inf Bn 1 Task Force
			Sprt Sec		2 5 ton wrecker	480	1	Fld Train	BSA Task Force
						481	1	Fld Train	BSA Task Force
					1 Truck	* 418	2	Maint	Mech Inf Bn 1 Task Force
					3 M88A1	* 357	2	Maint	Mech Inf Bn 1 Task Force
						* 358	2	Maint	Mech Inf Bn 1 Task Force
						* 352	2	Maint	Mech Inf Bn 1 Task Force
					1 HEMMT W	* 487	1	Maint	Mech Inf Bn 1 Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Mech Inf Bn 1	HHC	Bn Maint Plt (cont.)	Maint/SVC Sec		1 Truck	* 423	5	Maint	Mech Inf Bn 1 Task Force
					1 HMMWV	* 278	2	Maint	Mech Inf Bn 1 Task Force
					1 M113	* 373	2	Maint	Mech Inf Bn 1 Task Force
					4 Trucks	* 420	3	Maint	Mech Inf Bn 1 Task Force
						* 422	4	Maint	Mech Inf Bn 1 Task Force
						* 421	5	Maint	Mech Inf Bn 1 Task Force
						* 419	6	Maint	Mech Inf Bn 1 Task Force
				4 Rifle Co Maint Teams	1 Truck for 16 Maint Vehicles	* 424	2	Maint	Mech Inf Bn 1 Task Force
					4 M88A1	* 353	3	Maint	Mech Inf Bn 1 Task Force
						* 356	3	Maint	Mech Inf Bn 1 Task Force
						* 354	3	Maint	Mech Inf Bn 1 Task Force
						* 355	3	Maint	Mech Inf Bn 1 Task Force
					4 M113	* 369	4	Maint	Mech Inf Bn 1 Task Force
						* 370	4	Maint	Mech Inf Bn 1 Task Force
						* 371	4	Maint	Mech Inf Bn 1 Task Force
						* 372	4	Maint	Mech Inf Bn 1 Task Force
					8 Trucks (2 in 1 icon)	* 429	4	Maint	Mech Inf Bn 1 Task Force
						* 430	4	Maint	Mech Inf Bn 1 Task Force
						* 431	4	Maint	Mech Inf Bn 1 Task Force
						* 432	4	Maint	Mech Inf Bn 1 Task Force
				AA Co Maint Team	1 M113	* 368	6	Maint	Mech Inf Bn 1 Task Force
					1 Truck	* 425	2	Maint	Mech Inf Bn 1 Task Force
Rifle Co 1									
			HQ		2 M2	* 73	3	line	Tank Bn Task Force
						* 74	3	line	Tank Bn Task Force
					1 M113	* 131	2	Co rear	Tank Bn Task Force
					2 HMMWV	* 43	1	Co rear	Tank Bn Task Force
						* 44	2	Co rear	Tank Bn Task Force
					2 Trucks	* 157	1	Co rear	Tank Bn Task Force
						* 155	2	Co rear	Tank Bn Task Force
			Rifle Plt 1		4 M2	* 93	9	line	Tank Bn Task Force
						* 94	9	line	Tank Bn Task Force
						* 96	9	line	Tank Bn Task Force
						* 97	9	line	Tank Bn Task Force
			Rifle Plt 2		4 M2	* 98	9	line	Tank Bn Task Force
						* 100	9	line	Tank Bn Task Force
						* 89	9	line	Tank Bn Task Force
						* 91	9	line	Tank Bn Task Force
			Rifle Plt 3		4 M2	* 92	9	line	Tank Bn Task Froce
						* 95	4	line	Tank Bn Task Froce
						* 99	4	line	Tank Bn Task Froce
						* 90	4	line	Tank Bn Task Froce
Rifle Co 2									
			HQ		2 M2	* 75	3	line	Tank Bn Task Force
						* 76	3	line	Tank Bn Task Force
					1 M113	* 132	2	Co rear	Tank Bn Task Force
					2 HMMWV	* 45	1	Co rear	Tank Bn Task Force
						* 46	2	Co rear	Tank Bn Task Force
					2 Trucks	* 156	1	Co rear	Tank Bn Task Force
						* 158	2	Co rear	Tank Bn Task Force
			Rifle Plt 1		4 M2	* 81	9	line	Tank Bn Task Force
						* 82	9	line	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
						* 84	9	line	Tank Bn Task Force
						* 85	9	line	Tank Bn Task Force
		Rifle Plt 2			4 M2	* 86	9	line	Tank Bn Task Force
						* 88	9	line	Tank Bn Task Force
						* 77	9	line	Tank Bn Task Force
						* 78	9	line	Tank Bn Task Force
		Rifle Plt 3			4 M2	* 80	9	line	Tank Bn Task Force
						* 87	4	line	Tank Bn Task Force
						* 79	4	line	Tank Bn Task Force
						* 83	4	line	Tank Bn Task Force
	Rifle Co 3		HQ		2 M2	* 294	3	line	Mech Inf Bn 1 Task Force
						* 295	3	line	Mech Inf Bn 1 Task Force
					1 M113	* 375	2	Co rear	Mech Inf Bn 1 Task Force
					2 HMMWV	* 250	1	Co rear	Mech Inf Bn 1 Task Force
						* 251	2	Co rear	Mech Inf Bn 1 Task Force
					2 Truck	* 405	1	Co rear	Mech Inf Bn 1 Task Force
						* 407	2	Co rear	Mech Inf Bn 1 Task Force
		Rifle Plt 1			4 M2	* 321	9	line	Mech Inf Bn 1 Task Force
						* 319	9	line	Mech Inf Bn 1 Task Force
						* 318	9	line	Mech Inf Bn 1 Task Force
						* 310	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 2			4 M2	* 311	9	line	Mech Inf Bn 1 Task Force
						* 313	9	line	Mech Inf Bn 1 Task Force
						* 314	9	line	Mech Inf Bn 1 Task Force
						* 315	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 3			4 M2	* 317	9	line	Mech Inf Bn 1 Task Force
						* 320	4	line	Mech Inf Bn 1 Task Force
						* 312	4	line	Mech Inf Bn 1 Task Force
						* 316	4	line	Mech Inf Bn 1 Task Force
	Rifle Co 4		HQ		2 M2	* 308	3	line	Mech Inf Bn 1 Task Force
						* 309	3	line	Mech Inf Bn 1 Task Force
					1 M113	* 376	2	Co rear	Mech Inf Bn 1 Task Force
					2 HMMWV	* 248	1	Co rear	Mech Inf Bn 1 Task Force
						* 249	2	Co rear	Mech Inf Bn 1 Task Force
					2 Trucks	* 404	1	Co rear	Mech Inf Bn 1 Task Force
						* 406	2	Co rear	Mech Inf Bn 1 Task Force
		Rifle Plt 1			4 M2	* 296	9	line	Mech Inf Bn 1 Task Force
						* 297	9	line	Mech Inf Bn 1 Task Force
						* 299	9	line	Mech Inf Bn 1 Task Force
						* 300	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 2			4 M2	* 301	9	line	Mech Inf Bn 1 Task Force
						* 303	9	line	Mech Inf Bn 1 Task Force
						* 304	9	line	Mech Inf Bn 1 Task Force
						* 305	9	line	Mech Inf Bn 1 Task Force
		Rifle Plt 3			4 M2	* 307	9	line	Mech Inf Bn 1 Task Force
						* 298	4	line	Mech Inf Bn 1 Task Force
						* 302	4	line	Mech Inf Bn 1 Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location line	Area
						* 306	4		Mech Inf Bn 1 Task Force
	AA Co								
			HQ		1 M113	* 381	4	line	Mech Inf Bn 1 Task Force
					2 HMMWV	* 286	2	Co rear	Mech Inf Bn 1 Task Force
						* 287	2	Co rear	Mech Inf Bn 1 Task Force
		AA Plt							
					3 M113	* 378	3	line	Mech Inf Bn 1 Task Force
						* 379	3	line	Mech Inf Bn 1 Task Force
						* 380	3	line	Mech Inf Bn 1 Task Force
					12 ITV-TOW	* 383	4	line	Mech Inf Bn 1 Task Force
						* 384	4	line	Mech Inf Bn 1 Task Force
						* 385	4	line	Mech Inf Bn 1 Task Force
						* 386	4	line	Mech Inf Bn 1 Task Force
						* 387	4	line	Mech Inf Bn 1 Task Force
						* 388	4	line	Mech Inf Bn 1 Task Force
						* 389	4	line	Mech Inf Bn 1 Task Force
						* 390	4	line	Mech Inf Bn 1 Task Force
						* 391	4	line	Mech Inf Bn 1 Task Force
						* 392	4	line	Mech Inf Bn 1 Task Force
						* 393	4	line	Mech Inf Bn 1 Task Force
						* 394	4	line	Mech Inf Bn 1 Task Force
Mech Inf Bn 2									
	HHC								
			Bn HQ Sec						
				Tac CP	1 M2	* 595	5	Fwd	Mech Inf Bn 2 Task Force
				Main CP	2 HMMWV	* 510	2	Bn HHC	Mech Inf Bn 2 Task Force
						* 511	1	Bn HHC	Mech Inf Bn 2 Task Force
			S-1 Sec						
					1 HMMWV	* 548	5	Cbt Train	Mech Inf Bn 2 Task Force
					1 Truck	694	4	Fld Train	BSA Task Force
			S-2 Sec						
				Main CP	1 M577	* 609	4	Bn HHC	Mech Inf Bn 2 Task Force
			S-3 Sec						
				Tac CP	1 M2	* 594	3	Fwd	Mech Inf Bn 2 Task Force
					1 M113	* 630	1+1+2	Fwd	Mech Inf Bn 2 Task Force
				Main CP	1 M577	* 603	6	Bn HHC	Mech Inf Bn 2 Task Force
					3 HMMWV	* 506	2	Bn HHC	Mech Inf Bn 2 Task Force
						* 512	2	Bn HHC	Mech Inf Bn 2 Task Force
						* 549	2	Bn HHC	Mech Inf Bn 2 Task Force
			FSE Sec (Carried on Arty Bn TOE)						
					1 HMMWV	* 806	2	Bn HHC	Mech Inf Bn 2 Task Force
					1 Colt	* 839	2	Bn HHC	Mech Inf Bn 2 Task Force
			TACP Sec						
					1 HMMWV	* 516	2	Bn HHC	Mech Inf Bn 2 Task Force
			S-4 Sec						
					1 M577	* 608	2	Cbt Train	BSA Task Force
					1 HMMWV	* 507	2	Cbt Train	Mech Inf Bn 2 Task Force
			Co HQ						
					1 HMMWV	* 515	2	Bn HHC	Mech Inf Bn 2 Task Force
					1 HMMWV	521	2	Fld Train	BSA Task Force
					2 Truck	679	2	Fld Train	BSA Task Force
						678	1	Fld Train	BSA Task Force
		Bn Commo Plt							
				Main CP	2 HMMWV	* 509	2	Bn HHC	Mech Inf Bn 2 Task Force
						* 513	2	Bn HHC	Mech Inf Bn 2 Task Force

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Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad Cbt Trns CP	Vehicle	Icon #	Crew	Location	Area
					1 M577	* 610	3	Cbt Train	Mech Inf Bn 2 Task Force
					1 HMMWV	* 514	1	Cbt Train	Mech Inf Bn 2 Task Force
					3 CYCLE	* 550	1	Cbt Train	Mech Inf Bn 2 Task Force
						* 551	1	Cbt Train	Mech Inf Bn 2 Task Force
						* 552	1	Cbt Train	Mech Inf Bn 2 Task Force
		Bn Scout Plt	HQ Sec		2 M3	* 601	5	Fwd	Mech Inf Bn 2 Task Force
						* 598	5	Fwd	Mech Inf Bn 2 Task Force
			Scout Sec		4 M3	* 600	5	Fwd	Mech Inf Bn 2 Task Force
						* 602	5	Fwd	Mech Inf Bn 2 Task Force
						* 603	5	Fwd	Mech Inf Bn 2 Task Force
						* 597	5	Fwd	Mech Inf Bn 2 Task Force
		Hvy Mort Plt	Mort Plt HQ		2 HMMWV	* 527	2	Bn Rear	Mech Inf Bn 2 Task Force
						* 528	1	Bn Rear	Mech Inf Bn 2 Task Force
			Mort Sec HQ		2 M577	* 604	3	Bn Rear	Mech Inf Bn 2 Task Force
						* 605	3	Bn Rear	Mech Inf Bn 2 Task Force
				6 Mortar Squads	6 4.2 MTR	* 715	4	Bn Rear	Mech Inf Bn 2 Task Force
						* 716	4	Bn Rear	Mech Inf Bn 2 Task Force
						* 717	4	Bn Rear	Mech Inf Bn 2 Task Force
						* 718	4	Bn Rear	Mech Inf Bn 2 Task Force
						* 719	4	Bn Rear	Mech Inf Bn 2 Task Force
						* 720	4	Bn Rear	Mech Inf Bn 2 Task Force
		Bn Med Plt	Plt HQ		1 HMMWV	* 547	2	Cbt Train	Mech Inf Bn 2 Task Force
			Aid Station		2 Trucks (2 in 1 icon)	* 665	2	Cbt Train	Mech Inf Bn 2 Task Force
					2 M577-AMB	* 743	4	Cbt Train	Mech Inf Bn 2 Task Force
						* 744	3	Cbt Train	Mech Inf Bn 2 Task Force
			Evac Sec		1 M577-AMB	* 746	3	Cbt Train	Mech Inf Bn 2 Task Force
					7 M113-AMB (7 in 1 icon)	* 745	14	Cbt Train	Mech Inf Bn 2 Task Force
		Bn Sprt Plt	HQ Sec		1 HMMWV	508	3+2	Fld Train	BSA Task Force
			Trans Sec		4 Trucks (4 in 1 icon)	666	4	Fld Train	BSA Task Force
					5 HEMMT C (5 in 1 icon)	739	5	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	741	4	Fld Train	BSA Task Force
				Class III & V Team	8 HEMMT C (4 in 1 icon)	738	8	Fld Train	BSA Task Force
						737	4	Fld Train	BSA Task Force
					4 HEMMT P (4 in 1 icon)	740	4	Fld Train	BSA Task Force
			Mess Sec		1 Truck	676	2	Fld Train	BSA Task Force
					4 Trucks (4 in 1 icon)	667	12	Fld Train	BSA Task Force
		Bn Maint Plt	Plt HQ		2 HMMWV	* 519	1	Maint	Mech Inf Bn 2 Task Force
						* 520	1	Maint	Mech Inf Bn 2 Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area	
		Bn Maint Plt (cont.)	Admin Sec		1 HMMWV	518	1	Fld Train	BSA Task Force	
					7 Trucks	693	1	Fld Train	BSA Task Force	
						692	1	Fld Train	BSA Task Force	
						677	1	Fld Train	BSA Task Force	
						* 680	1	Maint	Mech Inf Bn 2 Task Force	
						* 681	1	Maint	Mech Inf Bn 2 Task Force	
						* 682	1	Maint	Mech Inf Bn 2 Task Force	
						* 684	2	Maint	Mech Inf Bn 2 Task Force	
				Spt Sec						
						2 5 ton wrecker	735	1	Fld Train	BSA Task Force
							736	1	Fld Train	BSA Task Force
						1 Truck	* 683	2	Maint	Mech Inf Bn 2 Task Force
						3 M88A1	* 612	2	Maint	Mech Inf Bn 2 Task Force
							* 613	2	Maint	Mech Inf Bn 2 Task Force
							* 614	2	Maint	Mech Inf Bn 2 Task Force
						1 HEMMT W	* 742	1	Maint	Mech Inf Bn 2 Task Force
					Maint/SVC Sec					
						1 Truck	* 685	5	Maint	Mech Inf Bn 2 Task Force
						1 HMMWV	* 517	2	Maint	Mech Inf Bn 2 Task Force
						1 M113	* 620	2	Maint	Mech Inf Bn 2 Task Force
						5 Truck	* 686	3	Maint	Mech Inf Bn 2 Task Force
							* 687	4	Maint	Mech Inf Bn 2 Task Force
							* 688	5	Maint	Mech Inf Bn 2 Task Force
							* 689	6	Maint	Mech Inf Bn 2 Task Force
					4 Rifle Co Maint Teams	1 Truck for 16 Maint Vehicles	* 690	2	Maint	Mech Inf Bn 2 Task Force
						4 M88A1	* 611	3	Maint	Mech Inf Bn 2 Task Force
							* 615	3	Maint	Mech Inf Bn 2 Task Force
							* 616	3	Maint	Mech Inf Bn 2 Task Force
							* 617	3	Maint	Mech Inf Bn 2 Task Force
						4 M113	* 619	4	Maint	Mech Inf Bn 2 Task Force
							* 618	4	Maint	Mech Inf Bn 2 Task Force
							* 639	4	Maint	Mech Inf Bn 2 Task Force
							* 640	4	Maint	Mech Inf Bn 2 Task Force
						8 Trucks (2 in 1 icons)	* 662	4	Maint	Mech Inf Bn 2 Task Force
							* 663	4	Maint	Mech Inf Bn 2 Task Force
							* 664	4	Maint	Mech Inf Bn 2 Task Force
							* 696	4	Maint	Mech Inf Bn 2 Task Force
					AA Co Maint Team	1 M113	* 638	6	Maint	Mech Inf Bn 2 Task Force
						1 Truck	* 691	2	Maint	Mech Inf Bn 2 Task Force
			Rifle Co 1							
					HQ					
						2 M2	* 322	3	line	Mech Inf Bn 1 Task Force
							* 323	3	line	Mech Inf Bn 1 Task Force
						1 M113	* 377	2	Co rear	Mech Inf Bn 1 Task Force
						2 HMMWV	* 289	1	Co rear	Mech Inf Bn 1 Task Force
							* 290	2	Co rear	Mech Inf Bn 1 Task Force
						2 Truck	* 443	1	Co rear	Mech Inf Bn 1 Task Force
							* 444	2	Co rear	Mech Inf Bn 1 Task Force
				Rifle Plt 1		4 M2	* 324	9	line	Mech Inf Bn 1 Task Force
							* 325	9	line	Mech Inf Bn 1 Task Force
							* 327	9	line	Mech Inf Bn 1 Task Force
							* 328	9	line	Mech Inf Bn 1 Task Force
				Rifle Plt 2		4 M2	* 329	9	line	Mech Inf Bn 1 Task Force
					* 330	9	line	Mech Inf Bn 1 Task Force		
					* 332	9	line	Mech Inf Bn 1 Task Force		
					* 333	9	line	Mech Inf Bn 1 Task Force		

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Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
		Rifle Plt 3			4 M2	* 335	9	line	Mech Inf Bn 1 Task Force
						* 326	4	line	Mech Inf Bn 1 Task Force
						* 331	4	line	Mech Inf Bn 1 Task Force
						* 334	4	line	Mech Inf Bn 1 Task Force
	Rifle Co 2		HQ		2 M2	* 584	3	line	Mech Inf Bn 2 Task Force
						* 585	3	line	Mech Inf Bn 2 Task Force
					1 M113	* 633	2	Co rear	Mech Inf Bn 2 Task Force
					2 HMMWV	* 542	1	Co rear	Mech Inf Bn 2 Task Force
						* 543	2	Co rear	Mech Inf Bn 2 Task Force
					2 Truck	* 695	1	Co rear	Mech Inf Bn 2 Task Force
						* 698	2	Co rear	Mech Inf Bn 2 Task Force
	Rifle Plt 1				4 M2	* 586	9	line	Mech Inf Bn 2 Task Force
						* 588	9	line	Mech Inf Bn 2 Task Force
						* 589	9	line	Mech Inf Bn 2 Task Force
						* 590	9	line	Mech Inf Bn 2 Task Force
	Rifle Plt 2				4 M2	* 592	9	line	Mech Inf Bn 2 Task Force
						* 593	9	line	Mech Inf Bn 2 Task Force
						* 566	9	line	Mech Inf Bn 2 Task Force
						* 568	9	line	Mech Inf Bn 2 Task Force
	Rifle Plt 3				4 M2	* 569	9	line	Mech Inf Bn 2 Task Force
						* 587	4	line	Mech Inf Bn 2 Task Force
						* 591	4	line	Mech Inf Bn 2 Task Force
						* 567	4	line	Mech Inf Bn 2 Task Force
	Rifle Co 3		HQ		2 M2	* 570	3	line	Mech Inf Bn 2 Task Force
						* 571	3	line	Mech Inf Bn 2 Task Force
					1 M113	* 632	2	Co rear	Mech Inf Bn 2 Task Force
					2 HMMWV	* 540	1	Co rear	Mech Inf Bn 2 Task Force
						* 541	2	Co rear	Mech Inf Bn 2 Task Force
					2 Truck	* 697	1	Co rear	Mech Inf Bn 2 Task Force
						* 699	2	Co rear	Mech Inf Bn 2 Task Force
	Rifle Plt 1				4 M2	* 572	9	line	Mech Inf Bn 2 Task Force
						* 574	9	line	Mech Inf Bn 2 Task Force
						* 575	9	line	Mech Inf Bn 2 Task Force
						* 576	9	line	Mech Inf Bn 2 Task Force
	Rifle Plt 2				4 M2	* 578	9	line	Mech Inf Bn 2 Task Force
						* 579	9	line	Mech Inf Bn 2 Task Force
						* 580	9	line	Mech Inf Bn 2 Task Force
						* 582	9	line	Mech Inf Bn 2 Task Force
	Rifle Plt 3				4 M2	* 583	9	line	Mech Inf Bn 2 Task Force
						* 573	4	line	Mech Inf Bn 2 Task Force
						* 577	4	line	Mech Inf Bn 2 Task Force
						* 581	4	line	Mech Inf Bn 2 Task Force
	Rifle Co 4		HQ		2 M2	* 553	3	line	Mech Inf Bn 2 Task Force
						* 596	3	line	Mech Inf Bn 2 Task Force
					1 M113	* 631	2	Co rear	Mech Inf Bn 2 Task Force
					2 HMMWV	* 536	1	Co rear	Mech Inf Bn 2 Task Force
						* 537	2	Co rear	Mech Inf Bn 2 Task Force
					2 Truck	* 659	1	Co rear	Mech Inf Bn 2 Task Force
						* 660	2	Co rear	Mech Inf Bn 2 Task Force
	Rifle Plt 1				4 M2	* 554	9	line	Mech Inf Bn 2 Task

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Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Mech Inf Bn 2	Rifle Co 4	Rifle Plt 2				* 556	9	line	Mech Inf Bn 2 Task
						* 557	9	line	Mech Inf Bn 2 Task
						* 558	9	line	Mech Inf Bn 2 Task
						* 560	9	line	Mech Inf Bn 2 Task
						* 561	9	line	Mech Inf Bn 2 Task
						* 562	9	line	Mech Inf Bn 2 Task
						* 564	9	line	Mech Inf Bn 2 Task
						* 565	9	line	Mech Inf Bn 2 Task
						* 555	4	line	Mech Inf Bn 2 Task
						* 559	4	line	Mech Inf Bn 2 Task
						* 563	4	line	Mech Inf Bn 2 Task
	AA Co	Rifle Plt 3				* 556	9	line	Mech Inf Bn 2 Task
						* 557	9	line	Mech Inf Bn 2 Task
						* 558	9	line	Mech Inf Bn 2 Task
						* 560	9	line	Mech Inf Bn 2 Task
						* 561	9	line	Mech Inf Bn 2 Task
						* 562	9	line	Mech Inf Bn 2 Task
						* 564	9	line	Mech Inf Bn 2 Task
						* 565	9	line	Mech Inf Bn 2 Task
						* 555	4	line	Mech Inf Bn 2 Task
						* 559	4	line	Mech Inf Bn 2 Task
						* 563	4	line	Mech Inf Bn 2 Task
		3 AA Plt	HQ		1 M113 2 HMMWV	* 634	4	line	Mech Inf Bn 2 Task
						* 544	2	Co rear	Mech Inf Bn 2 Task
						* 545	2	Co rear	Mech Inf Bn 2 Task
						* 635	3	line	Mech Inf Bn 2 Task
						* 636	3	line	Mech Inf Bn 2 Task
						* 637	3	line	Mech Inf Bn 2 Task
						* 641	4	line	Mech Inf Bn 2 Task
						* 642	4	line	Mech Inf Bn 2 Task
						* 643	4	line	Mech Inf Bn 2 Task
						* 644	4	line	Mech Inf Bn 2 Task
						* 645	4	line	Mech Inf Bn 2 Task
						* 656	4	line	Mech Inf Bn 2 Task
						* 647	4	line	Mech Inf Bn 2 Task
						* 648	4	line	Mech Inf Bn 2 Task
						* 649	4	line	Mech Inf Bn 2 Task
						* 650	4	line	Mech Inf Bn 2 Task
						* 651	4	line	Mech Inf Bn 2 Task
						* 652	4	line	Mech Inf Bn 2 Task
Tank Bn	HHC		Bn HQ	Tac CP	2 M1	* 1	4	Fwd	Tank Bn Task Force
						* 2	4	Fwd	Tank Bn Task Force
						* 61	3	Bn HHC	Tank Bn Task Force
			S-1 Sec	Main CP	1 HMMWV	* 54	6	Cbt Train	Tank Bn Task Force
					1 Truck	173	6	Fld Train	BSA Task Force
			S-2 Sec	Tac CP Main CP	1 riding in APC in S-3 Sec	* 114	4	Bn HHC	Tank Bn Task Force
					1 M577				
			S-3 Sec	Tac CP Main CP	1 M113	* 137	1+1+2	Fwd	Tank Bn Task Force
					1 M577	* 113	6	Bn HHC	Tank Bn Task Force
					1 Truck	* 162	4	Bn HHC	Tank Bn Task Force
					2 HMMWV	* 55	2	Bn HHC	Tank Bn Task Force
						* 62	1	Bn HHC	Tank Bn Task Force
			FSE Sec (Carried on Arty Bn TOE)		1 HMMWV	* 802	2	Bn HHC	Tank Bn Task Force
					1 Colt	* 837	2	Bn HHC	Tank Bn Task Force
			TACP Sec	Tac CP Main CP	2 riding in APC in S-3 Sec	* 56	1	Bn HHC	Tank Bn Task Force
					1 HMMWV				
			S-4 Sec	Cbt Trms CP	1 M577	* 112	2	Cbt Train	Tank Bn Task Force

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Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
					1 HMMWV	* 58	2	Cbt Train	Tank Bn Task Force
					2 ride in spt plt veh/HMMWV in HQ Sec				
			Co HQ	Fld Trns CP					
				Main CP	1 HMMWV	* 60	2	Bn HHC	Tank Bn Task Force
				Fld Trns CP	1 HMMWV	59	2	Fld Train	BSA Task Force
					1 Truck	161	3	Fld Train	BSA Task Force
		Bn Commo Plt		Main CP	2 HMMWV	* 57	2	Bn HHC	Tank Bn Task Force
						* 53	1	Bn HHC	Tank Bn Task Force
				Cbt Trns CP	1 M577	* 111	4	Cbt Train	Tank Bn Task Force
					3 CYCLE	* 70	1	Cbt Train	Tank Bn Task Force
						* 71	1	Cbt Train	Tank Bn Task Force
						* 72	1	Cbt Train	Tank Bn Task Force
		Bn Scout Plt	HQ Sec		2 M3	* 103	5	Fwd	Tank Bn Task Force
						* 106	5	Fwd	Tank Bn Task Force
			Scout Sec		4 M3	* 101	5	Fwd	Tank Bn Task Force
						* 102	5	Fwd	Tank Bn Task Force
						* 104	5	Fwd	Tank Bn Task Force
						* 105	5	Fwd	Tank Bn Task Force
		Hvy Mort Plt	Mort Plt HQ		2 HMMWV	* 63	2	Bn Rear	Tank Bn Task Force
						* 64	1	Bn Rear	Tank Bn Task Force
			Mort Sec HQ		2 M577	* 109	3	Bn Rear	Tank Bn Task Force
						* 110	3	Bn Rear	Tank Bn Task Force
				6 Mortar Squads	6 4.2 MTR	* 201	4	Bn Rear	Tank Bn Task Force
						* 202	4	Bn Rear	Tank Bn Task Force
						* 203	4	Bn Rear	Tank Bn Task Force
						* 204	4	Bn Rear	Tank Bn Task Force
						* 205	4	Bn Rear	Tank Bn Task Force
						* 206	4	Bn Rear	Tank Bn Task Force
		Bn Med Plt	Plt HQ		1 HMMWV	* 65	2	Cbt Train	Tank Bn Task Force
			Aid Station		2 Trucks (2 in 1 icon)	* 194	2	Cbt Train	Tank Bn Task Force
					2 M577-AMB	* 228	4	Cbt Train	Tank Bn Task Force
						* 229	3	Cbt Train	Tank Bn Task Force
			Evac Sec		1M577-AMB	* 230	3	Cbt Train	Tank Bn Task Force
					7 M113-AMB (7 in 1 icon)	* 231	14	Cbt Train	Tank Bn Task Force
		Bn Spt Plt	HQ Sec		1 HMMWV	66	3+2	Fld Train	BSA Task Force
			Trans Sec		3 Truck	167	2	Fld Train	BSA Task Force
						171	1	Fld Train	BSA Task Force
						170	1	Fld Train	BSA Task Force
				Ammo Team	1 HEMMT C	222	2	Fld Train	BSA Task Force

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Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
		Bn Spt Plt (cont.)			9 HEMMT C (9 in 1 icon)	223	9	Fld Train	BSA Task Force
				POL Team	1 Truck	163	1	Fld Train	BSA Task Force
					2 HEMMT P	225	2	Fld Train	BSA Task Force
						226	2	Fld Train	BSA Task Force
					10 HEMMT P (10 in 1 icon)	224	10	Fld Train	BSA Task Force
				Co Mess Team	3 Trucks (3 in 1 icon)	184	12	Fld Train	BSA Task Force
		Bn Maint Plt							
			Plt HQ		2 HMMWV	67	1	Maint	Tank Bn Task Force
						68	1	Maint	Tank Bn Task Force
			Admin Sec		5 Truck	* 174	1	Maint	Tank Bn Task Force
						* 175	1	Maint	Tank Bn Task Force
						* 176	1	Maint	Tank Bn Task Force
						* 177	1	Maint	Tank Bn Task Force
						* 178	1	Maint	Tank Bn Task Force
			Rec/Sprt Sec		1 Truck	166	2	Fld Train	BSA Task Force
					1 5 Ton Wrecker	221	1	Fld Train	BSA Task Force
					1 Recovery Veh HEMMT	227	1	Fld Train	BSA Task Force
				CBT Trns	3 M88A1	* 115	2	Maint	Tank Bn Task Force
						* 119	2	Maint	Tank Bn Task Force
						* 121	2	Maint	Tank Bn Task Force
			Maint/SVC Sec		1 HMMWV	* 69	2	Maint	Tank Bn Task Force
					5 Trucks	* 168	2	Maint	Tank Bn Task Force
						* 172	4	Maint	Tank Bn Task Force
						* 179	4	Maint	Tank Bn Task Force
						* 165	4	Maint	Tank Bn Task Force
						169	6	Fld Train	BSA Task Force
				4 Tank Co Maint Teams	16 Trucks (4 in 1 icon)	* 181	16	Maint	Tank Bn Task Force
						* 182	16	Maint	Tank Bn Task Force
						* 183	16	Maint	Tank Bn Task Force
						* 180	16	Maint	Tank Bn Task Force
				Co Trns Element	4 M113	* 134	4	Maint	Tank Bn Task Force
						* 136	4	Maint	Tank Bn Task Force
						* 133	4	Maint	Tank Bn Task Force
						* 135	4	Maint	Tank Bn Task Force
					4 M88A1	* 116	3	Maint	Tank Bn Task Force
						* 117	3	Maint	Tank Bn Task Force
						* 118	3	Maint	Tank Bn Task Force
						* 120	3	Maint	Tank Bn Task Force
		Tank Co 1							
			HQ Sec		2 M1A1	* 5	4	line	Tank Bn Task Force
						* 6	4	line	Tank Bn Task Force
					2 HMMWV	* 49	2	Co rear	Tank Bn Task Force
						* 50	2	Co rear	Tank Bn Task Force
					Truck	* 160	2	Co rear	Tank Bn Task Force
					12 M1A1	* 7	4	line	Tank Bn Task Force
						* 8	4	line	Tank Bn Task Force
						* 9	4	line	Tank Bn Task Force
						* 10	4	line	Tank Bn Task Force
						* 11	4	line	Tank Bn Task Force
						* 12	4	line	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area		
	Tank Co 2		HQ Sec			* 13	4	line	Tank Bn Task Force		
						* 14	4	line	Tank Bn Task Force		
						* 15	4	line	Tank Bn Task Force		
						* 16	4	line	Tank Bn Task Force		
						* 17	4	line	Tank Bn Task Force		
						* 18	4	line	Tank Bn Task Force		
					2 M1A1	* 3	4	line	Tank Bn Task Force		
						* 4	4	line	Tank Bn Task Force		
						2 HMMWV	* 47	2	Co rear	Tank Bn Task Force	
							* 48	2	Co rear	Tank Bn Task Force	
						1 Truck	* 159	2	Co rear	Tank Bn Task Force	
						3 Tank Plt		12 M1A1	* 19	4	line
					* 20				4	line	Tank Bn Task Force
					* 21				4	line	Tank Bn Task Force
					* 22				4	line	Tank Bn Task Force
					* 23				4	line	Tank Bn Task Force
					* 24				4	line	Tank Bn Task Force
					* 25				4	line	Tank Bn Task Force
					* 26				4	line	Tank Bn Task Force
					* 27				4	line	Tank Bn Task Force
					* 28				4	line	Tank Bn Task Force
					* 29				4	line	Tank Bn Task Force
					* 30				4	line	Tank Bn Task Force
	Tank Co 3		HQ Sec		2 M1A1	* 234	4	line	Mech Inf Bn 1 Task Force		
						* 233	4	line	Mech Inf Bn 1 Task Force		
					2 HMMWV	* 246	2	Co rear	Mech Inf Bn 1 Task Force		
						* 247	2	Co rear	Mech Inf Bn 1 Task Force		
					1 Truck	* 445	2	Co rear	Mech Inf Bn 1 Task Force		
					3 Tank Plt		12 M1A1	232	4	line	Mech Inf Bn 1 Task Force
								* 233	4	line	Mech Inf Bn 1 Task Force
								* 236	4	line	Mech Inf Bn 1 Task Force
								* 237	4	line	Mech Inf Bn 1 Task Force
								* 238	4	line	Mech Inf Bn 1 Task Force
								* 239	4	line	Mech Inf Bn 1 Task Force
								* 240	4	line	Mech Inf Bn 1 Task Force
								* 241	4	line	Mech Inf Bn 1 Task Force
								* 242	4	line	Mech Inf Bn 1 Task Force
								* 243	4	line	Mech Inf Bn 1 Task Force
								* 244	4	line	Mech Inf Bn 1 Task Force
								* 245	4	line	Mech Inf Bn 1 Task Force
	Tank Co 4		HQ Sec		2 M1A1	* 503	4	line	Mech Inf Bn 2 Task Force		
						* 504	4	line	Mech Inf Bn 2 Task Force		
					2 HMMWV	* 538	2	Co rear	Mech Inf Bn 2 Task Force		
						* 539	2	Co rear	Mech Inf Bn 2 Task Force		
					1 Truck	* 700	2	Co rear	Mech Inf Bn 2 Task Force		
					3 Tank Plt		12 M1A1	* 492	4	line	Mech Inf Bn 2 Task Force
								* 493	4	line	Mech Inf Bn 2 Task Force
								* 494	4	line	Mech Inf Bn 2 Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area		
Air Def Arty Batt	Chaparral ADA Plt (from Corps)	Plt HQ	4 Chaparral Sqds	1 M113 1 Truck 4 Chaparral	* 495	4	line	Mech Inf Bn 2 Task Force			
					* 496	4	line	Mech Inf Bn 2 Task Force			
					* 497	4	line	Mech Inf Bn 2 Task Force			
					* 498	4	line	Mech Inf Bn 2 Task Force			
					* 499	4	line	Mech Inf Bn 2 Task Force			
					* 500	4	line	Mech Inf Bn 2 Task Force			
					* 501	4	line	Mech Inf Bn 2 Task Force			
					* 502	4	line	Mech Inf Bn 2 Task Force			
					* 505	4	line	Mech Inf Bn 2 Task Force			
					* 828	3	FSB	BSA Task Force			
					* 863	2	FSB	BSA Task Force			
					840	4	1 TFA	Tank Bn Task Force			
					* 841	4	2 TFA	Mech Inf Bn 1 Task Force			
					842	4	3 TFA	Mech Inf Bn 1 Task Force			
					* 843	4	FSB	BSA Task Force			
					Air Def Arty Batt	Batt HQ			1 M577	813	2
	5 Trucks (5 in 1 icon)	857	10	FSB					BSA Task Force		
	2 HMMWV(2 in 1 icon)	762	4	FSB					BSA Task Force		
									BSA Task Force		
	MSCS Plt	Plt HQ				1 HMMWV	760	2	FSB	BSA Task Force	
		Motor Maint Sec				4 Trucks (4 in 1 icon)	853	16	FSB	BSA Task Force	
	Sys Maint Sec			3 HMMWV(3 in 1 icon)		766	9	FSB	BSA Task Force		
				1 2/2 ton van-shop		888	1	FSB	BSA Task Force		
		Gun Plt	3 Gun Plt HQ				3 M113	* 138	2	1 TF HHC Area	Tank Bn Task Force
							* 367	2	2 TF HHC Area	Mech Inf Bn 1 Task Force	
	9 Gun Sqds		3 HMMWV				830	2	Bde HHC	BSA Task Force	
							* 52	2	1 TF HHC Area	Tank Bn Task Force	
		* 280	2	2 TF HHC Area	Mech Inf Bn 1 Task Force						
		764	2	Bde HHC	BSA Task Force						
		9 Vulcans (4 each)	* 139	4	1 TFA	Tank Bn Task Force					
		* 140	4	1 TFA	Tank Bn Task Force						
		* 141	4	1 TFA	Tank Bn Task Force						
		* 395	4	2 TFA	Mech Inf Bn 1 Task Force						
	* 396	4	2 TFA	Mech Inf Bn 1 Task Force							
	* 397	4	2 TFA	Mech Inf Bn 1 Task Force							
	Missile Plt	Missile Plt HQ			2 Truck	866	1	FSB	BSA Task Force		
						867	1	FSB	BSA Task Force		
					1 HMMWV	763	3	FSB	BSA Task Force		
4 Missile Sec				4 HMMWV	* 51	3	1 TF HHC Area	Tank Bn Task Force			
					* 279	3	2 TF HHC Area	Mech Inf Bn 1 Task Force			
					* 546	3	3 TF HHC Area	Mech Inf Bn 2 Task Force			
					* 765	3	Bde HHC	Mech Inf Bn 2 Task Force			
					834	4	Bde HHC	BSA Task Force			
					835	4	FSB	BSA Task Force			
836	4	FSB	BSA Task Force								

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Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Air Def Arty Batt (cont.)				20 Missile Teams	20 HMMWV armed w/Stinger	* 187	2	1 TFA Co	Tank Bn Task Force
						* 188	2	1 TF HHC Area	Tank Bn Task Force
						* 189	2	1 TFA Co	Tank Bn Task Force
						* 190	2	1 TFA Co	Tank Bn Task Force
						* 191	2	1 TFA Co	Tank Bn Task Force
						* 446	2	2 TFA Co	Mech Inf Bn 1 Task Force
						* 447	2	2 TFA Co	Mech Inf Bn 1 Task Force
						* 448	2	2 TFA Co	Mech Inf Bn 1 Task Force
						* 449	2	2 TF HHC Area	Mech Inf Bn 1 Task Force
						* 450	2	2 TFA Co	Mech Inf Bn 1 Task Force
						* 701	2	3 TF HHC Area	Mech Inf Bn 2 Task Force
						* 702	2	3 TFA Co	Mech Inf Bn 2 Task Force
						* 703	2	3 TFA Co	Mech Inf Bn 2 Task Force
						* 704	2	3 TFA Co	Mech Inf Bn 2 Task Force
						* 705	2	3 TFA Co	Mech Inf Bn 2 Task Force
						878	2	Bde HHC	BSA Task Force
						879	2	FSB	BSA Task Force
						880	2	FSB	BSA Task Force
						881	2	FSB	BSA Task Force
						882	2	FSB	BSA Task Force
Fwd Spt Bn	HQ & HQ Detachment		Commd Sec		2 HMMWV	921	4	FSB	BSA Task Force
						920	5	FSB	BSA Task Force
			PAC Sec		2 HMMWV	922	2	FSB	BSA Task Force
						923	3	FSB	BSA Task Force
			Plans-Ops Br		1 HMMWV	924	4	FSB	BSA Task Force
			Commo Br		2 HMMWV	925	1	FSB	BSA Task Force
						891	1	FSB	BSA Task Force
			Spt Op Sec		1 HMMWV	892	3	FSB	BSA Task Force
			S-4 Sec		1 5-ton van-expansible	995	2	FSB	BSA Task Force
			Detachment HQ		1 HMMWV	893	3	FSB	BSA Task Force
						6 Truck	3	FSB	BSA Task Force
						970	2	FSB	BSA Task Force
						971	2	FSB	BSA Task Force
						972	2	FSB	BSA Task Force
						973	2	FSB	BSA Task Force
						968	2	FSB	BSA Task Force
						969	2	FSB	BSA Task Force
						894	1	FSB	BSA Task Force
	Supply Co		Co HQ		2 HMMWV	895	5	FSB	BSA Task Force
						896	5	FSB	BSA Task Force
						2 Truck	4	FSB	BSA Task Force
						946	4	FSB	BSA Task Force
						947	4	FSB	BSA Task Force
						1 5 ton wrecker	1	FSB	BSA Task Force
						983	1	FSB	BSA Task Force
			Supply Plt HQ		1 HMMWV	897	3	FSB	BSA Task Force
			Supply Sec						

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Ordnance Co			Class V (ATP) Sec		2 Semi-trailer flatbed	975	2	FSB	BSA Task Force
						974	2	FSB	BSA Task Force
					1 Semi-trailer van	979	2	FSB	BSA Task Force
					1 HMMWV	899	4	FSB	BSA Task Force
					1 Truck	948	3	FSB	BSA Task Force
			Petroleum Sec		1 HMMWV	898	7	FSB	BSA Task Force
					1 5 ton tractor	987	7	FSB	BSA Task Force
					10 Semi-trailer POL (10in1 icon)	977	10	FSB	BSA Task Force
					1 HMMWV	902	2	FSB	BSA Task Force
			Co HQ		3 Truck	937	1	FSB	BSA Task Force
						938	1	FSB	BSA Task Force
						939	1	FSB	BSA Task Force
					4 Truck (4 in 1 icon)	943	16	FSB	BSA Task Force
			Maint Control Sec		2 HMMWV	907	6	FSB	BSA Task Force
						904	6	FSB	BSA Task Force
					2 Semi-trailer van	980	2	FSB	BSA Task Force
						978	2	FSB	BSA Task Force
			Class IX Spt Sec		2 HMMWV	906	3	FSB	BSA Task Force
						920	3	FSB	BSA Task Force
					1 5 ton van exp	993	3	FSB	BSA Task Force
					6 Semi-trailer flatbed (6in1 icon)	976	6	FSB	BSA Task Force
			Aumtv/Armt Plt		6 Semi-trailer van (6 in 1 icon)	981	6	FSB	BSA Task Force
					12 Truck (12 in 1 icon)	950	12	FSB	BSA Task Force
					Plt HQ				
					1 HMMWV	908	2	FSB	BSA Task Force
			Autmv Maint Rep Sec		2 2/2 ton van	996	7	FSB	BSA Task Force
						994	8	FSB	BSA Task Force
			Armt Maint Rep Sec		2 Truck	949	2	FSB	BSA Task Force
						951	2	FSB	BSA Task Force
			Arty Spt Team		1 HMMWV	909	2	FSB	BSA Task Force
					3 2/2 ton vans (3 in 1 icon)	992	6	FSB	BSA Task Force
					1 M113	935	3	FSB	BSA Task Force
					3 Truck	952	3	FSB	BSA Task Force
			Eng System Spt Team			954	3	FSB	BSA Task Force
						953	3	FSB	BSA Task Force
					1 HMMWV	914	3	FSB	BSA Task Force
					1 2/2 ton van	997	2	FSB	BSA Task Force
					2 M113	934	2	FSB	BSA Task Force
						936	2	FSB	BSA Task Force
					3 Truck	956	2	FSB	BSA Task Force
						957	2	FSB	BSA Task Force
						958	2	FSB	BSA Task Force
					1 2/2 ton van	988	2	FSB	BSA Task Force
			Grd Spt Equip Plt		1 5 ton wrecker	986	1	FSB	BSA Task Force
					2 HMMWV	913	2	FSB	BSA Task Force
						911	2	FSB	BSA Task Force
					Plt HQ				
			Svc/Recovery Sec		1 HMMWV	912	2	FSB	BSA Task Force
					1 Truck	959	9	FSB	BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area				
Eng Bn	HHQ			Grd Sprt Equip Rep Sec	2 5-ton wrecker	984 985	2 2	FSB FSB	BSA Task Force BSA Task Force				
					1 Truck	955 960	4 4	FSB FSB	BSA Task Force BSA Task Force				
			Elect Equip Rep Sec	6 Truck	961 962	1 1	FSB FSB	BSA Task Force BSA Task Force					
					963 964	1 1	FSB FSB	BSA Task Force BSA Task Force					
			Elect Equip Rep Sec		965 966	1 1	FSB FSB	BSA Task Force BSA Task Force					
					918 917	4 3	FSB FSB	BSA Task Force BSA Task Force					
			MSL Maint Rep Sec	4 HMMWV	918 916	3 3	FSB FSB	BSA Task Force BSA Task Force					
					919 967	2 1	FSB FSB	BSA Task Force BSA Task Force					
			1 Truck		967	1	FSB	BSA Task Force					
			Co HQ		2 Trucks	940 941	4 4	FSB FSB	BSA Task Force BSA Task Force				
					2 HMMWV	903 901	4 4	FSB FSB	BSA Task Force BSA Task Force				
			Trmt Plt		1 5 ton wrecker	982	2	FSB	BSA Task Force				
			Plt HQ		1 HMMWV	900	2	FSB	BSA Task Force				
					1 Truck	942	2	FSB	BSA Task Force				
			2 Treatment Sqds		4 M577	929	4	FSB	BSA Task Force				
						930 931 932	4 4 4	FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force				
			Area Suppt Sqd		1 5 ton van expansible	989	4	FSB	BSA Task Force				
					Treatment Sqd, Area	2 5 ton van expansible	990 991	4 4	FSB FSB	BSA Task Force BSA Task Force			
			Patient Holding Sqd		2 Truck	944 945	2 2	FSB FSB	BSA Task Force BSA Task Force				
			Amb. Plt		Plt HQ								
			2 Amb Sqds, wheel		1 HMMWV	905	2	FSB	BSA Task Force				
					4 HMMWV-AMB (4 in 1 icon)	998	8	FSB	BSA Task Force				
			3 AmbI Sqds, track			999	12	FSB	BSA Task Force				
			Eng Bn	HHQ		Commnd Sec	1 M113	831	5	FSB	BSA Task Force		
							1 HMMWV	777	4	FSB	BSA Task Force		
						Co HQ	2 Trucks (2 in 1 icon)	860	4	FSB	BSA Task Force		
							1 HMMWV	770	2	FSB	BSA Task Force		
						Admin/Log Sec	2 HMMWV	771	4+3	FSB	BSA Task Force		
								772	4+4	FSB	BSA Task Force		
						Op/Planning Sec	2 M577 (2 in 1 icon)	814	6	FSB	BSA Task Force		
							2 HMMWV (2 in 1 icon)	773	6	FSB	BSA Task Force		

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Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
			Tac Sec		1 Truck	859	3	FSB	BSA Task Force
			Commo Sec		1 M113	832	4	FSB	BSA Task Force
			Asst Bde Eng Sec		2 HMMWV(2 in 1 icon)	775	8	FSB	BSA Task Force
			Food Serv Sec		1 HMMWV	804	3	FSB	BSA Task Force
		Sprt Plt			2 Trucks (2 in 1 icon)	858	12	FSB	BSA Task Force
			Sprt Plt HQ		1 HMMWV	761	4	FSB	BSA Task Force
			Bn Maint Sec		1 M88A1	823	2	FSB	BSA Task Force
					1 HMMWV	767	4	FSB	BSA Task Force
					4 Trucks (4 in 1 icon)	852	40	FSB	BSA Task Force
					1 5 ton wrecker	886	1	FSB	BSA Task Force
			Transp Sec		1 Truck	854	2	FSB	BSA Task Force
					5 Trucks (5 in 1 icon)	855	5	FSB	BSA Task Force
	Eng Co 1		Co HQ		1 M113	* 130	3	1 TFA	Tank Bn Task Force
					2 Truck	* 153	3	1 TFA	Tank Bn Task Force
						154	3	FSB	BSA Task Force
					1 HMMWV	42	2	FSB	BSA Task Force
		2 Eng Plt							
			2 Plt HQ		2 M113	* 126	2	1 TFA	Tank Bn Task Force
						* 127	2	1 TFA	Tank Bn Task Force
					2 HMMWV	38	2	FSB	BSA Task Force
						40	2	FSB	BSA Task Force
				6 Eng Sqd	6 M113	* 122	8	1 TFA	Tank Bn Task Force
						* 123	8	1 TFA	Tank Bn Task Force
						* 124	8	1 TFA	Tank Bn Task Force
						* 125	8	1 TFA	Tank Bn Task Force
						* 128	8	1 TFA	Tank Bn Task Force
						* 129	8	1 TFA	Tank Bn Task Force
		Asl & Obs Plt							
			Plt HQ		2 HMMWV	* 39	2	1 TFA	Tank Bn Task Force
						* 41	2	1 TFA	Tank Bn Task Force
			Assault Sec 1		4 AVLB (2 in 1 icon)	* 145	4	1 TFA	Tank Bn Task Force
						* 146	4	1 TFA	Tank Bn Task Force
			Assault Sec 2		2 CEV (2 in 1 icon)	* 144	8	1 TFA	Tank Bn Task Force
			ObsTacle Sec		2 6 ton M548 (2 in 1 icon)	* 218	4	1 TFA	Tank Bn Task Force
					4 Semi-trailer flatbet (4 in 1 icon)	220	4	FSB	BSA Task Force
					7 ACE (7 in 1 icon)	147	7	FSB	BSA Task Force
					2 Volcano (2 in 1 icon)	* 192	4	1 TFA	Tank Bn Task Force
	Eng Co 2								
			Co HQ		1 M113	* 359	3	2 TFA	Mech Inf Bn 1 Task Force
					2 Truck	* 427	3	2 TFA	Mech Inf Bn 1 Task Force
						426	3	FSB	BSA Task Force
					1 HMMWV	284	2	FSB	BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area	
		2 Eng Plt	2 Plt HQ		2 M113	* 360	2	2 TFA	Mech Inf Bn 1 Task Force	
					* 366	2	2 TFA	Mech Inf Bn 1 Task Force		
		2 HMMWV			282	2	FSB	BSA Task Force		
					285	2	FSB	BSA Task Force		
		6 Eng Sqd			6 M113	* 361	8	2 TFA	Mech Inf Bn 1 Task Force	
						* 362	8	2 TFA	Mech Inf Bn 1 Task Force	
						* 363	8	2 TFA	Mech Inf Bn 1 Task Force	
						* 364	8	2 TFA	Mech Inf Bn 1 Task Force	
						* 365	8	2 TFA	Mech Inf Bn 1 Task Force	
						* 382	8	2 TFA	Mech Inf Bn 1 Task Force	
		Asl & Obs Plt	Plt HQ		2 HMMWV	* 281	2	2 TFA	Mech Inf Bn 1 Task Force	
						* 283	2	2 TFA	Mech Inf Bn 1 Task Force	
			Assault Sec 1		4 AVLB (2 in 1 icon)	* 402	4	2 TFA	Mech Inf Bn 1 Task Force	
						* 401	4	2 TFA	Mech Inf Bn 1 Task Force	
			Assault Sec 2							
			ObsTacle Sec		2 CEV (2 in 1 icon)	* 400	8	2 TFA	Mech Inf Bn 1 Task Force	
			Eng Co 3 (3 co per eng bn)			2 6 ton M548 (2 in 1 icon)	* 476	4	2 TFA	Mech Inf Bn 1 Task Force
						4 Semi-trailer flatbet (4 in 1 icon)	479	4	FSB	BSA Task Force
						7 ACE (7 in 1 icon)	403	7	FSB	BSA Task Force
						2 Volcano (2 in 1 icon)	* 451	4	2 TFA	Mech Inf Bn 1 Task Force
	Co HQ					1 M113	* 629	3	3 TFA	Mech Inf Bn 2 Task Force
						2 Trucks	* 674	3	3 TFA	Mech Inf Bn 2 Task Force
							675	3	FSB	BSA Task Force
						1 HMMWV	526	2	FSB	BSA Task Force
	2 Eng Plt	2 Plt HQ 1		2 M113	* 627	2	3 TFA	Mech Inf Bn 2 Task Force		
					* 628	2	3 TFA	Mech Inf Bn 2 Task Force		
				2 HMMWV	524	2	FSB	BSA Task Force		
					525	2	FSB	BSA Task Force		
				6 Eng Sqd	6 M113	* 621	8	3 TFA	Mech Inf Bn 2 Task Force	
						* 622	8	3 TFA	Mech Inf Bn 2 Task Force	
						* 623	8	3 TFA	Mech Inf Bn 2 Task Force	
						* 624	8	3 TFA	Mech Inf Bn 2 Task Force	
						* 625	8	3 TFA	Mech Inf Bn 2 Task Force	
						* 626	8	3 TFA	Mech Inf Bn 2 Task Force	
	Asl & Obs Plt	Plt HQ			* 522	2	3 TFA	Mech Inf Bn 2 Task Force		
					* 523	2	3 TFA	Mech Inf Bn 2 Task Force		
		Assault Sec 1		2 HMMWV	* 656	4	3 TFA	Mech Inf Bn 2 Task Force		
					* 657	4	3 TFA	Mech Inf Bn 2 Task Force		
		Assault Sec 2								
		Obstacle Sec		4 AVLB (2 in 1 icon)	* 655	8	3 TFA	Mech Inf Bn 2 Task Force		
				2 6 ton M548 (2 in 1 icon)	* 729	4	3 TFA	Mech Inf Bn 2 Task Force		
				4 Semi-trailer flatbet (4 in 1 icon)	734	4	FSB	BSA Task Force		
				7 ACE (7 in 1 icon)	658	7	FSB	BSA Task Force		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle 2 Volcano (2 in 1 icon)	Icon # * 706	Crew 4	Location 3 TFA	Area Mech Inf Bn 2 Task Force
Fld Arty Bn	HHB		Commd Sec		2 HMMWV	792 789	5 6	FSB FSB	BSA Task Force BSA Task Force
			Batt HQ		2 Truck	862 865	2 2	FSB FSB	BSA Task Force BSA Task Force
					1 HMMWV	780	3	FSB	BSA Task Force
			Ops Sec		1 M577 1 HMMWV	933 927	4 4	FSB FSB	BSA Task Force BSA Task Force
			Fire Dir Sec		1 M577 1 Truck	816 870	5 4	FSB FSB	BSA Task Force BSA Task Force
			Intel Sec		1 M577	815	4	FSB	BSA Task Force
		Survey Plt	Plt HQ		1 HMMWV	805	3	FSB	BSA Task Force
			Survey Sec		4 HMMWV	791 788 787 790	3 3 2 2	FSB FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force BSA Task Force
		Commo Plt	Plt HQ		2 HMMWV	783 795	6 5	FSB FSB	BSA Task Force BSA Task Force
			Wire Sec		4 HMMWV	785 782 784 786	5 5 4 4	FSB FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force BSA Task Force
			Radio Sec		3HMMWV	794 793 799	3 3 4	FSB FSB FSB	BSA Task Force BSA Task Force BSA Task Force
				Treatment Team	1Truck 1 HMMWV-AMB	861 889	2+4 2	FSB FSB	BSA Task Force BSA Task Force
				Pers/Admin Cen	1 Truck 2 HMMWV	873 798	4 4	FSB FSB	BSA Task Force BSA Task Force
				Unit Ministry Team		778	1	FSB	BSA Task Force
				4 Tank Co FIST Tms	12 FIST-V	* 207 * 208 * 209 * 210 * 466 * 467 * 468 * 469 * 721 * 722 * 723 * 724	4 4 4 4 4 4 4 4 4 4 4 4	line line line line line line line line line line line line	Tank Bn Task Force Tank Bn Task Force Tank Bn Task Force Tank Bn Task Force Mech Inf Bn 1 Task Force Mech Inf Bn 1 Task Force Mech Inf Bn 1 Task Force Mech Inf Bn 1 Task Force Mech Inf Bn 2 Task Force Mech Inf Bn 2 Task Force Mech Inf Bn 2 Task Force Mech Inf Bn 2 Task Force
			Combat Medic Sec	Fld Trns	3 HEMMT C (3 in 1 icon) 1 HMMWV-AMB	887 890	3 2	FSB Bde HHC	BSA Task Force BSA Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fid Arty Bn	Svc Batt		Batt HQ		1 HMMWV	768	7	FSB	BSA Task Force
			BnSupply Sec		9 Trucks (9 in 1 icon)	856	9	FSB	BSA Task Force
			Maint Plt HQ		1 HMMWV	774	6	FSB	BSA Task Force
					1 Truck	872	1	FSB	BSA Task Force
			Bn Maintenance Sec		3 M578 (3 in 1 icon)	883	6	FSB	BSA Task Force
					3 Trucks (3 in 1 icon)	864	24	FSB	BSA Task Force
					1 5 ton wrecker	885	1	FSB	BSA Task Force
				HQ Battery Maint Tm	1 Truck	868	10	FSB	BSA Task Force
					3 Trucks (3 in 1 icon)	846	33	FSB	BSA Task Force
			SVC Batt Maint Sec		1 Truck	847	7	FSB	BSA Task Force
			Ammo Plt HQ		1 HMMWV	776	4	FSB	BSA Task Force
			2 Ammo Secs		14 Trucks (14 in 1 icon)	849	28	FSB	BSA Task Force
					7 Trucks (7 in 1 icon)	850	14	FSB	BSA Task Force
			Food Svc Sec		1 Truck	851	5	FSB	BSA Task Force
					4 Trucks (4 in 1 icon)	852	16	FSB	BSA Task Force
	Fid Arty Batt 1		Batt HQ		1 Truck	* 186	3	1 TFA	Tank Bn Task force
					2 HMMWV	* 31	2	1 TFA	Tank Bn Task force
						* 33	2	1 TFA	Tank Bn Task force
			Commo Sec		1 HMMWV	* 32	2	1 TFA	Tank Bn Task Force
		Firing Plt 1	Plt HQ		4 HMMWV	* 34	2	1 TFA	Tank Bn Task Force
						* 35	2	1 TFA	Tank Bn Task Force
						* 36	2	1 TFA	Tank Bn Task Force
						* 37	2	1 TFA	Tank Bn Task Force
		Firing Plt 2	Fire Direction Center 1		1 M577	* 107	8	1 TFA	Tank Bn Task Force
					1 M577	* 108	8	1 TFA	Tank Bn Task Force
			8 Howitzer Sec		8 M548	* 211	4	1 TFA	Tank Bn Task Force
						* 212	4	1 TFA	Tank Bn Task Force
						* 213	4	1 TFA	Tank Bn Task Force
						* 214	4	1 TFA	Tank Bn Task Force
						* 215	4	1 TFA	Tank Bn Task Force
						* 216	4	1 TFA	Tank Bn Task Force
						* 217	4	1 TFA	Tank Bn Task Force
						* 219	4	1 TFA	Tank Bn Task Force
					8 M109	* 193	5	1 TFA	Tank Bn Task Force
						* 194	5	1 TFA	Tank Bn Task Force
						* 195	5	1 TFA	Tank Bn Task Force
						* 196	5	1 TFA	Tank Bn Task Force
						* 197	5	1 TFA	Tank Bn Task Force
						* 198	5	1 TFA	Tank Bn Task Force
						* 199	5	1 TFA	Tank Bn Task Force
						* 200	5	1 TFA	Tank Bn Task Force
			Ammo Sec		6 Trucks	* 148	2	1 TFA	Tank Bn Task Force
						* 149	2	1 TFA	Tank Bn Task Force
						* 150	2	1 TFA	Tank Bn Task Force
						* 151	2	1 TFA	Tank Bn Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area
Fid Arty Bn	Fid Arty Batt 2					* 152	2	1 TFA	Tank Bn Task Force
						* 185	2	1 TFA	Tank Bn Task Force
						* 409	3	2 TFA	Mech Inf Bn 1 Task Force
						* 256	2	2 TFA	Mech Inf Bn 1 Task Force
						* 257	2	2 TFA	Mech Inf Bn 1 Task Force
						* 255	2	2 TFA	Mech Inf Bn 1 Task Force
						* 252	2	2 TFA	Mech Inf Bn 1 Task Force
						* 253	2	2 TFA	Mech Inf Bn 1 Task Force
						* 254	2	2 TFA	Mech Inf Bn 1 Task Force
						* 258	2	2 TFA	Mech Inf Bn 1 Task Force
						* 348	8	2 TFA	Mech Inf Bn 1 Task Force
						* 349	8	2 TFA	Mech Inf Bn 1 Task Force
						* 470	4	2 TFA	Mech Inf Bn 1 Task Force
						* 471	4	2 TFA	Mech Inf Bn 1 Task Force
						* 472	4	2 TFA	Mech Inf Bn 1 Task Force
						* 473	4	2 TFA	Mech Inf Bn 1 Task Force
						* 474	4	2 TFA	Mech Inf Bn 1 Task Force
						* 475	4	2 TFA	Mech Inf Bn 1 Task Force
						* 477	4	2 TFA	Mech Inf Bn 1 Task Force
						* 478	4	2 TFA	Mech Inf Bn 1 Task Force
						* 452	5	2 TFA	Mech Inf Bn 1 Task Force
						* 453	5	2 TFA	Mech Inf Bn 1 Task Force
						* 454	5	2 TFA	Mech Inf Bn 1 Task Force
						* 455	5	2 TFA	Mech Inf Bn 1 Task Force
						* 456	5	2 TFA	Mech Inf Bn 1 Task Force
						* 457	5	2 TFA	Mech Inf Bn 1 Task Force
						* 458	5	2 TFA	Mech Inf Bn 1 Task Force
						* 459	5	2 TFA	Mech Inf Bn 1 Task Force
						* 408	2	2 TFA	Mech Inf Bn 1 Task Force
						* 410	2	2 TFA	Mech Inf Bn 1 Task Force
						* 411	2	2 TFA	Mech Inf Bn 1 Task Force
						* 412	2	2 TFA	Mech Inf Bn 1 Task Force
						* 413	2	2 TFA	Mech Inf Bn 1 Task Force
						* 414	2	2 TFA	Mech Inf Bn 1 Task Force
						* 661	3	3 TFA	Mech Inf Bn 2 Task Force
						* 534	2	3 TFA	Mech Inf Bn 2 Task Force
						* 535	2	3 TFA	Mech Inf Bn 2 Task Force
						* 533	2	3 TFA	Mech Inf Bn 2 Task Force
						* 529	2	3 TFA	Mech Inf Bn 2 Task Force
						* 530	2	3 TFA	Mech Inf Bn 2 Task Force
						* 531	2	3 TFA	Mech Inf Bn 2 Task Force
						* 532	2	3 TFA	Mech Inf Bn 2 Task Force
						* 606	8	3 TFA	Mech Inf Bn 2 Task Force
						* 607	8	3 TFA	Mech Inf Bn 2 Task Force
						* 725	4	3 TFA	Mech Inf Bn 2 Task Force
						* 726	4	3 TFA	Mech Inf Bn 2 Task Force
						* 727	4	3 TFA	Mech Inf Bn 2 Task Force
						* 728	4	3 TFA	Mech Inf Bn 2 Task Force

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B1
Brigade Description by Tactical Layout
Heavy Brigade, Movement to Contact

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	Area					
Fid Arty Bn	Fid Arty Batt 3				8 M109	* 730	4	3 TFA	Mech Inf Bn 2 Task Force					
						* 731	4	3 TFA	Mech Inf Bn 2 Task Force					
						* 732	4	3 TFA	Mech Inf Bn 2 Task Force					
						* 733	4	3 TFA	Mech Inf Bn 2 Task Force					
						* 707	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 708	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 709	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 710	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 711	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 712	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 713	5	3 TFA	Mech Inf Bn 2 Task Force					
						* 714	5	3 TFA	Mech Inf Bn 2 Task Force					
					Ammo Sec	6 Trucks	* 668	2	3 TFA	Mech inf Bn 2 Task Force				
							* 669	2	3 TFA	Mech inf Bn 2 Task Force				
							* 670	2	3 TFA	Mech inf Bn 2 Task Force				
							* 671	2	3 TFA	Mech inf Bn 2 Task Force				
							* 672	2	3 TFA	Mech inf Bn 2 Task Force				
						</								

Notes: FLD TRN: In brigade with FSB CBT TRN: In battalion near rear MAINT: In battalion near rear In BSA: BDE HHC, FSB, FLD TRN
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Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
1	*	20.602	41.411	Tank Bn Task Force	4	fwd	M1	HB FM MtC	Tank Bn	HHC		Bn HQ	Tac CP Element	
2	*	20.689	41.412	Tank Bn Task Force	4	fwd	M1	HB FM MtC	Tank Bn	HHC		Bn HQ	Tac CP Element	
3	*	16.948	43.896	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec		
4	*	16.337	43.907	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec		
5	*	21.072	42.916	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec		
6	*	21.655	42.899	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec		
7	*	16.702	44.008	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
8	*	16.797	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
9	*	16.893	44.012	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
10	*	17.002	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
11	*	17.200	44.005	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
12	*	17.295	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
13	*	17.396	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
14	*	17.497	44.008	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
15	*	19.707	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
18	*	19.800	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			
19	*	19.898	43.506	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
20	*	20.001	43.513	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
21	*	21.406	43.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
22	*	21.498	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
23	*	21.592	43.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
24	*	21.703	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
25	*	21.902	43.004	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt			
26	*	22.011	43.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #		X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
26	*	22.095	43.014	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
27	*	22.192	43.004	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 1	Tank Plt				
27	*	24.196	44.011	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
28	*	24.294	44.007	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
29	*	24.400	44.010	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
30	*	24.502	44.009	Tank Bn Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 2	Tank Plt				
31	*	22.322	33.149	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
32	*	22.242	33.076	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Commo Sec			
33	*	22.246	33.151	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
34	*	23.295	33.629	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
35	*	23.212	33.634	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
36	*	22.901	33.623	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
37	*	22.809	33.628	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Fld arty Bn	Fld arty Batt 1	Firing Plt 1	Plt HQ			
38		18.902	18.161	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 2			
39	*	21.004	44.154	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Plt HQ			
40		18.900	18.232	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 2			
41	*	21.000	44.242	Tank Bn Task Force	2	1 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Plt HQ			
42		18.948	18.195	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 1		Co HQ			
43	*	19.396	38.936	Tank Bn Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
44	*	19.393	39.069	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ			
45	*	23.798	41.071	Tank Bn Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
46	*	23.793	40.941	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ			
47	*	21.565	38.650	Tank Bn Task Force	2	Co rear	HMMWV	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			
48	*	21.624	38.649	Tank Bn Task Force	2	Cbt	HMMWV	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
49	*	16.757	40.584	Tank Bn Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 1		HQ Sec		
50	*	16.824	40.583	Tank Bn Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 1		HQ Sec		
51	*	20.757	36.127	Tank Bn Task Force	3	1 TF HHC Area	HMMWV	HB FM Mtc		Air Def arty Batt	Missile Plt	Missile Sec		
52	*	20.716	36.129	Tank Bn Task Force	2	1 TF HHC Area	HMMWV	HB FM Mtc		Air Def arty Batt	Gun Plt	Gun Plt HQ		
53	*	20.797	36.127	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt		Main CP Element	
54	*	21.600	34.599	Tank Bn Task Force	6	Cbt train	HMMWV	HB FM Mtc	Tank Bn	HHC		S-1 Sec	Main CP Element	
55	*	20.853	36.205	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC		S-3 Sec	Main CP Element	
56	*	21.041	36.156	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC		S-3 Sec	TACP Sec	
57	*	20.854	36.124	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt		Main CP Element	
58	*	21.501	34.603	Tank Bn Task Force	2	Cbt train	HMMWV	HB FM Mtc	Tank Bn	HHC		S-4 Sec	Cbt trains CP Element	
59		16.002	19.216	BSA Task Force	2	Fld train	HMMWV	HB BSA Mtc	Tank Bn	HHC		Co HQ	Fld trains CP Element	
60	*	21.005	36.108	Tank Bn Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC		Co HQ	Main CP Element	
61	*	21.040	36.239	Tank Bn Task Force	3	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC		Bn HQ	Main CP Element	
62	*	20.796	36.203	Tank Bn Task Force	1	Bn HHC	HMMWV	HB FM Mtc	Tank Bn	HHC		S-3 Sec	Main CP Element	
63	*	19.325	37.446	Tank Bn Task Force	2	Bn rear	HMMWV	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt	Mort Plt HQ		
64	*	19.289	37.448	Tank Bn Task Force	1	Bn rear	HMMWV	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt	Mort Plt HQ		
65	*	21.595	34.515	Tank Bn Task Force	2	Cbt train	HMMWV	HB FM Mtc	Tank Bn	HHC	Bn Med Plt	Plt HQ		
66		15.905	19.212	BSA Task Force	3+2	Fld train	HMMWV	HB BSA Mtc	Tank Bn	HHC	Bn Sprt Plt	HQ Sec		
67	*	20.501	33.135	Tank Bn Task Force	1	Maint	HMMWV	HB FM Mtc	Tank Bn	HHC	Bn Maint Plt	Plt HQ		
68	*	20.561	33.131	Tank Bn Task Force	1	Maint	HMMWV	HB FM Mtc	Tank Bn	HHC	Bn Maint Plt	Plt HQ		
69	*	20.605	33.207	Tank Bn Task Force	2	Maint	HMMWV	HB FM Mtc	Tank Bn	HHC		Maint/SVC Sec		
70	*	21.303	34.601	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt	HQ Sec	Cbt trains CP Element	
71	*	21.352	34.604	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt	HQ Sec	Cbt trains CP Element	
72	*	21.405	34.605	Tank Bn Task Force	1	Cbt train	Motorcyle	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt		Cbt trains CP Element	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
73	*	23.847	43.919	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
74	*	23.396	43.910	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
75	*	18.872	43.414	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		
76	*	19.264	43.415	Tank Bn Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		
77	*	16.193	44.011	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2			
78	*	16.296	44.012	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2			
79	*	16.393	44.011	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3			
80	*	16.502	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3			
81	*	18.700	43.505	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1			
82	*	18.797	43.506	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1			
83	*	18.894	43.507	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3			
84	*	18.998	43.511	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1			
85	*	19.198	43.507	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1			
86	*	19.297	43.509	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2			
87	*	19.396	43.511	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3			
88	*	19.498	43.510	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2			
89	*	20.902	43.008	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2			
90	*	21.104	43.007	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3			
91	*	21.004	43.009	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2			
92	*	21.192	43.013	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3			
93	*	23.197	44.004	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1			
94	*	23.288	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1			
95	*	23.392	44.005	Tank Bn Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3			
96	*	23.487	44.006	Tank Bn Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #		X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
97	*	23.685	44.007	Tank Bn Task Force	9	line	M2	HB FM Mtc	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
98	*	23.786	44.004	Tank Bn Task Force	9	line	M2	HB FM Mtc	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
99	*	23.895	44.003	Tank Bn Task Force	4	line	M2	HB FM Mtc	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
100	*	23.993	44.006	Tank Bn Task Force	9	line	M2	HB FM Mtc	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
101	*	18.198	49.206	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
102	*	18.391	49.197	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
103	*	18.303	49.117	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	HQ Sec			
104	*	22.598	49.401	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
105	*	22.801	49.401	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	Scout Sec			
106	*	22.712	49.315	Tank Bn Task Force	5	fwd	M3	HB FM Mtc	Tank Bn	HHC	Bn Scout Plt	HQ Sec			
107	*	22.855	33.640	Tank Bn Task Force	8	1 TFA	M577	HB FM Mtc	Fld arty Bn	Fld arty Batt 1	Firing Plt 2	Fire Direction Center 1			
108	*	23.255	33.647	Tank Bn Task Force	8	1 TFA	M577	HB FM Mtc	Fld arty Bn	Fld arty Batt 1	Firing Plt 2	Fire Direction Center 2			
109	*	19.496	37.517	Tank Bn Task Force	3	Bn rear	M577	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt	Mort Sec HQ			
110	*	19.105	37.519	Tank Bn Task Force	3	Bn rear	M577	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt	Mort Sec HQ			
111	*	21.450	34.610	Tank Bn Task Force	4	Cbt train	M577	HB FM Mtc	Tank Bn	HHC	Bn Commo Plt		Cbt trains CP Element		
112	*	21.554	34.614	Tank Bn Task Force	2	Cbt train	M577	HB FM Mtc	Tank Bn	HHC		S-4 Sec	Cbt trains CP Element		
113	*	20.942	36.210	Tank Bn Task Force	6	Bn HHC	M577	HB FM Mtc	Tank Bn	HHC		S-3 Sec	Main CP Element		
114	*	20.990	36.209	Tank Bn Task Force	4	Bn HHC	M577	HB FM Mtc	Tank Bn	HHC		S-1 Sec	Main CP Element		
115	*	20.711	33.203	Tank Bn Task Force	2	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Cbt trains CP Element		
116	*	20.063	33.201	Tank Bn Task Force	3	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Co trains Element		
117	*	20.256	33.206	Tank Bn Task Force	3	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Co trains Element		
118	*	20.349	33.200	Tank Bn Task Force	3	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Co trains Element		
119	*	20.658	33.204	Tank Bn Task Force	2	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Cbt trains Element		
120	*	20.161	33.203	Tank Bn Task Force	3	Maint	Vehicle- Medium/M88A	HB FM Mtc	Tank Bn	HHC			Co trains Element		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
121	*	20.757	33.205	Tank Bn Task Force	2	Maint	Vehicle-Medium/M88A	HB FM M1C	Tank Bn	HHC		Cbt trains Element		
122	*	21.105	44.253	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 1
123	*	21.204	44.156	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 2
124	*	21.203	44.253	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 3
125	*	21.299	44.254	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 4
126	*	21.403	44.154	Tank Bn Task Force	2	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 1		
127	*	21.403	44.258	Tank Bn Task Force	2	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 1	Plt HQ 1		
128	*	21.105	44.158	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 5
129	*	21.297	44.160	Tank Bn Task Force	8	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1	Eng Plt 2			Eng Sqd 6
130	*	21.592	44.211	Tank Bn Task Force	3	1 TFA	M113	HB FM M1C	Eng Bn	Eng Co 1		Co HQ		
131	*	23.801	41.011	Tank Bn Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 1	Rifle Co 1		HQ		
132	*	19.397	39.006	Tank Bn Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 1	Rifle Co 2		HQ		
133	*	20.115	33.201	Tank Bn Task Force	4	Maint	M113	HB FM M1C	Tank Bn	HHC		Co trains Element		
134	*	20.300	33.198	Tank Bn Task Force	4	Maint	M113	HB FM M1C	Tank Bn	HHC		Co trains Element		
135	*	20.012	33.206	Tank Bn Task Force	4	Maint	M113	HB FM M1C	Tank Bn	HHC		Co trains Element		
136	*	20.211	33.205	Tank Bn Task Force	4	Maint	M113	HB FM M1C	Tank Bn	HHC		Co trains Element		
137	*	20.646	41.340	Tank Bn Task Force	1+1+2	fwd	M113	HB FM M1C	Tank Bn	HHC		S-2 Sec	Tac CP Element	
138	*	20.720	36.218	Tank Bn Task Force	2	1 TF HHC Area	M113	HB FM M1C		Air Def arty Batt	Gun Plt	Gun Plt HQ		
139	*	18.080	34.232	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM M1C		Air Def arty Batt	Gun Plt			Gun Sqd
140	*	23.281	43.099	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM M1C		Air Def arty Batt	Gun Plt			Gun Sqd
141	*	16.594	42.719	Tank Bn Task Force	4	1 TFA	Vulcan	HB FM M1C		Air Def arty Batt	Gun Plt			Gun Sqd
142	*	20.405	49.005	Tank Bn Task Force	3	fwd	M113 with AN/PPS-5	HB FM M1C			GSR Plt 1			GSR SQUAD 1
143	*	20.307	49.008	Tank Bn Task Force	3	fwd	M113 with AN/PPS-5	HB FM M1C			GSR Plt 1			GSR SQUAD 1
144	*	20.905	44.199	Tank Bn Task Force	8	1 TFA	2 CEV (2 in 1 icon)	HB FM M1C	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 2		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
145	*	23.661	43.780	Tank Bn Task Force	4	1 TFA	2 AVL B (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 1		
146	*	19.146	43.260	Tank Bn Task Force	4	1 TFA	2 AVL B (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Assault Sec 1		
147		18.748	18.163	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec		
148	*	22.245	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec		
149	*	22.297	32.988	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec		
150	*	22.346	32.988	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec		
151	*	22.396	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec		
152	*	22.442	32.986	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec		
153	*	21.488	44.195	Tank Bn Task Force	3	1 TFA	Truck	HB FM MtC	Eng Bn	Eng Co 1		Co HQ		
154		18.999	18.190	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 1		Co HQ		
155	*	19.358	38.996	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
156	*	23.760	41.008	Tank Bn Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		
157	*	19.427	38.997	Tank Bn Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 1		HQ		
158	*	23.832	41.003	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 1	Rifle Co 2		HQ		
159	*	21.592	38.674	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 2		HQ Sec		
160	*	16.786	40.595	Tank Bn Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 1		HQ Sec		
161		15.952	19.206	BSA Task Force	3	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		Co HQ	Fld trains CP Element	
162	*	20.899	36.202	Tank Bn Task Force	4	Bn HHC	Truck	HB FM MtC	Tank Bn	HHC		S-3 Sec	Main CP Element	
163		15.998	19.309	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			POL Team
164	*	21.529	34.514	Tank Bn Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station		
165	*	20.395	33.192	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec		
166		15.652	19.204	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Maint Plt	Rec/Sprt Sec		
167		15.998	19.391	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec		
168	*	20.555	33.205	Tank Bn Task Force	2	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
169	15.798	19.207	BSA Task Force	6	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		Maint/SVC Sec			
170	15.906	19.394	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec			
171	15.958	19.392	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt	Trans Sec			
172	*	20.494	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
173	15.850	19.199	BSA Task Force	6	Fld train	Truck	HB BSA MtC	Tank Bn	HHC		S-1 Sec	Main CP Element		
174	*	20.901	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
175	*	20.950	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
176	*	20.850	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
177	*	20.993	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
178	*	20.801	Tank Bn Task Force	1	Maint	Truck	HB FM MtC	Tank Bn	HHC	Bn Maint Plt	Admin Sec			
179	*	20.448	Tank Bn Task Force	4	Maint	Truck	HB FM MtC	Tank Bn	HHC		Maint/SVC Sec			
180	*	20.316	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
181	*	20.923	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
182	*	20.725	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
183	*	20.524	Tank Bn Task Force	16	Maint	4 Trucks (4 in 1 icon)	HB FM MtC	Tank Bn	HHC				Tank Co Maint Team	
184	15.542	19.202	BSA Task Force	12	Fld train	3 Trucks (3 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt			Co Mess Team	
185	*	22.192	Tank Bn Task Force	2	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Ammo Sec			
186	*	22.297	Tank Bn Task Force	3	1 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Batt HQ			
187	*	23.897	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
188	*	20.537	Tank Bn Task Force	2	1 TF HHC Area	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
189	*	17.005	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
190	*	19.492	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
191	*	21.725	Tank Bn Task Force	2	1 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
192	*	18.831	Tank Bn Task Force	4	1 TFA	2 Volcano (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #		X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
193	*	22.896	33.812	Tank Bn Task Force	5	1 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
194	*	23.003	33.811	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
195	*	23.096	33.814	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
196	*	23.195	33.816	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
197	*	23.292	33.813	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
198	*	23.388	33.814	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
199	*	22.794	33.817	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
200	*	22.695	33.817	Tank Bn Task Force	5	1 TFA	155mm SP HOW	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
201	*	19.589	37.606	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
202	*	19.105	37.614	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
203	*	19.012	37.620	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
204	*	19.197	37.612	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
205	*	19.402	37.608	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
206	*	19.497	37.610	Tank Bn Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Tank Bn	HHC	Hvy Mort Plt				Mortar Squad
207	*	19.424	43.363	Tank Bn Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB				Tank Co FIST Tm 1	
208	*	16.684	43.843	Tank Bn Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB				Tank Co FIST Tm 2	
209	*	23.954	43.873	Tank Bn Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB				Tank Co FIST Tm 3	
210	*	21.403	42.836	Tank Bn Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB				Tank Co FIST Tm 4	
211	*	22.792	33.713	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
212	*	22.897	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M549	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
213	*	23.005	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M550	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
214	*	23.095	33.714	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M551	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
215	*	23.197	33.712	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M552	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			
216	*	23.293	33.710	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M553	HB FM Mtc	Fld arty Bn	Fld arty Batt 1		Howitzer Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
217	*	23.389	33.706	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M554	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec		
218	*	20.797	44.206	Tank Bn Task Force	4	1 TFA	Carrier/M548 (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec		
219	*	22.694	33.715	Tank Bn Task Force	4	1 TFA	Cargo Carrier/M555	HB FM MtC	Fld arty Bn	Fld arty Batt 1		Howitzer Sec		
220		18.777	18.253	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 1	Asl & Obs Plt	Obstacle Sec		
221		15.753	19.216	BSA Task Force	1	Fld train	5 Ton Wrecker	HB BSA MtC	Tank Bn	HHC	Bn Maint Plt	Rec/Sprt Sec		
222		15.850	19.402	BSA Task Force	2	Fld train	Cargo HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt		Ammo Team	
223		15.593	19.401	BSA Task Force	9	Fld train	HEMMT (9 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt		Ammo Team	
224		15.624	19.316	BSA Task Force	10	Fld train	HEMMT (10 in 1 icon)	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt		POL Team	
225		15.955	19.320	BSA Task Force	2	Fld train	Fuel HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt		POL Team	
226		15.905	19.313	BSA Task Force	2	Fld train	Fuel HEMMT	HB BSA MtC	Tank Bn	HHC	Bn Sprt Plt		POL Team	
227		15.702	19.213	BSA Task Force	1	Fld train	RCoverly Veh HEMMT	HB BSA MtC	Tank Bn	HHC		Rec/Sprt Sec		
228	*	21.453	34.526	Tank Bn Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station		
229	*	21.398	34.535	Tank Bn Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Aid Station		
230	*	21.597	34.446	Tank Bn Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Evac Sec		
231	*	21.397	34.444	Tank Bn Task Force	14	Cbt train	Ambulances (7 in 1 icon)	HB FM MtC	Tank Bn	HHC	Bn Med Plt	Evac Sec		
232	*	9.308	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
233	*	9.400	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec		
233	*	10.931	42.283	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
234	*	11.735	42.299	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec		
236	*	11.112	42.407	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
237	*	11.205	42.410	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
238	*	11.306	42.414	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
239	*	11.407	42.414	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			
240	*	11.608	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 3	Tank Plt			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
241	*	11.706	42.412	Mech Inf Bn 1 Task Force	4	line	M1	HB FM Mtc	Tank Bn	Tank Co 3	Tank Plt			
242	*	11.800	42.418	Mech Inf Bn 1 Task Force	4	line	M1	HB FM Mtc	Tank Bn	Tank Co 3	Tank Plt			
243	*	11.901	42.415	Mech Inf Bn 1 Task Force	4	line	M1	HB FM Mtc	Tank Bn	Tank Co 3	Tank Plt			
244	*	9.110	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM Mtc	Tank Bn	Tank Co 3	Tank Plt			
245	*	9.206	42.413	Mech Inf Bn 1 Task Force	4	line	M1	HB FM Mtc	Tank Bn	Tank Co 3	Tank Plt			
246	*	11.427	39.175	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 3		HQ Sec		
247	*	11.364	39.172	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 3		HQ Sec		
248	*	8.597	38.668	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	Rifle Co 4		HQ		
249	*	8.598	38.540	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	Rifle Co 4		HQ		
250	*	5.993	39.944	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	Rifle Co 3		HQ		
251	*	5.993	40.064	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	Rifle Co 3		HQ		
252	*	6.591	33.802	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ		
253	*	6.913	33.802	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ		
254	*	6.504	33.806	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ		
255	*	7.541	33.289	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Commo Sec		
256	*	7.471	33.364	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Batt HQ		
257	*	7.529	33.366	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Batt HQ		
258	*	6.996	33.801	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 1	Plt HQ		
259	*	11.129	37.141	Mech Inf Bn 1 Task Force	2	Bn rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ		
260	*	11.084	37.145	Mech Inf Bn 1 Task Force	1	Bn rear	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ		
261	*	10.655	35.927	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element	
262	*	10.653	36.022	Mech Inf Bn 1 Task Force	1	Bn HHC	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element	
263	*	10.545	35.998	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element	
264	*	10.490	36.000	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
265	*	10.395	36.007	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		TACP Sec	Main CP Element	
266	*	10.397	35.901	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element	
267	*	10.492	35.203	Mech Inf Bn 1 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-4 Sec	Cbt trains CP Element	
268	*	10.349	36.007	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		Co HQ	Main CP Element	
269	*	10.597	35.202	Mech Inf Bn 1 Task Force	5	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-1 Sec		
270	*	10.443	36.003	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element	
271	*	10.444	35.901	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element	
272	*	10.395	35.211	Mech Inf Bn 1 Task Force	1	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element	
273	*	10.598	35.125	Mech Inf Bn 1 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Plt HQ		
274		10.508	19.425	BSA Task Force	1	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
275	*	9.369	34.694	Mech Inf Bn 1 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ		
276		10.994	19.406	BSA Task Force	2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element	
277	*	9.315	34.692	Mech Inf Bn 1 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ		
278	*	9.705	34.758	Mech Inf Bn 1 Task Force	2	Maint	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
279	*	10.350	35.915	Mech Inf Bn 1 Task Force	3	2 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Missile Plt	Missile Sec		
280	*	10.307	35.919	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	HMMWV	HB FM MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ		
281	*	10.401	43.541	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Plt HQ		
282		17.696	17.960	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 2		
283	*	10.398	43.464	Mech Inf Bn 1 Task Force	2	2 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Plt HQ		
284		17.741	17.997	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ		
285		17.693	18.039	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 2		
286	*	13.048	43.621	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	AA Co		HQ		
287	*	13.005	43.623	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 1	AA Co		HQ		
288		10.784	19.424	BSA Task Force	3+2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	HQ Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
289	*	13.798	38.540	Mech Inf Bn 1 Task Force	1	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	HQ			
290	*	13.796	38.660	Mech Inf Bn 1 Task Force	2	Co rear	HMMWV	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	HQ			
291	*	10.308	35.206	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt	Cbt trains CP Element		
292	*	10.367	35.207	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt	Cbt trains CP Element		
293	*	10.336	35.206	Mech Inf Bn 1 Task Force	1	Cbt train	Motorcycle	HB FM MtC	Mech Inf Bn 1	HHC	Bn Commo Plt	Cbt trains CP Element		
294	*	5.866	43.890	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	HQ			
295	*	6.368	43.895	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	HQ			
296	*	5.690	44.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1			
297	*	5.797	44.006	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1			
298	*	5.906	44.006	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3			
299	*	6.003	44.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1			
300	*	6.199	44.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 1			
301	*	6.294	44.005	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2			
302	*	6.398	44.007	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3			
303	*	6.495	43.999	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2			
304	*	6.696	44.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2			
305	*	6.800	44.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 2			
306	*	6.903	44.007	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3			
307	*	6.999	44.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	Rifle Plt 3			
308	*	8.260	42.310	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	HQ			
309	*	8.674	42.296	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 4	HQ			
310	*	8.096	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1			
311	*	8.199	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2			
312	*	8.306	42.409	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
313	*	8.401	42.407	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2			
314	*	8.602	42.407	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2			
315	*	8.695	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2			
316	*	8.797	42.406	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3			
317	*	8.898	42.406	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3			
318	*	10.599	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1			
319	*	10.697	42.404	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1			
320	*	10.796	42.408	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3			
321	*	10.892	42.405	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1			
322	*	12.793	40.879	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ		
323	*	13.272	40.881	Mech Inf Bn 1 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ		
324	*	12.592	41.009	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
325	*	12.689	41.006	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
326	*	12.789	41.005	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
327	*	12.895	41.008	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
328	*	13.096	41.002	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
329	*	13.190	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
330	*	13.388	41.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
331	*	13.290	41.005	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
332	*	13.598	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
333	*	13.697	41.003	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
334	*	13.790	41.009	Mech Inf Bn 1 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
335	*	13.901	41.007	Mech Inf Bn 1 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 1	Rifle Plt			
336	*	8.197	40.210	Mech Inf Bn 1 Task Force	5	fwd	M2	HB FM MtC	Mech Inf Bn 1	HHC		Bn HQ Sec	Tac CP Element	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
337	*	8.112	40.213	Mech Inf Bn 1 Task Force	3	fwd	M2	HB FM Mtc	Mech Inf Bn 1	HHC		S-3 Sec	Tac CP Element	
338	*	13.353	49.135	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec		
339	*	6.398	48.696	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section		
340	*	6.301	48.697	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section		
341	*	6.350	48.624	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec		
342	*	13.398	49.203	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section		
343	*	13.292	49.199	Mech Inf Bn 1 Task Force	5	fwd	M3	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section		
344	*	10.598	36.002	Mech Inf Bn 1 Task Force	6	Bn HHC	M577	HB FM Mtc	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element	
345	*	10.593	35.911	Mech Inf Bn 1 Task Force	4	Bn HHC	M577	HB FM Mtc	Mech Inf Bn 1	HHC		S-2 Sec	Main CP Element	
346	*	10.905	37.218	Mech Inf Bn 1 Task Force	3	Bn rear	M577	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ		
347	*	11.287	37.208	Mech Inf Bn 1 Task Force	3	Bn rear	M577	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ		
348	*	6.546	33.808	Mech Inf Bn 1 Task Force	8	2 TFA	M577	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 2	Fire Direction Center 1		
349	*	6.953	33.803	Mech Inf Bn 1 Task Force	8	2 TFA	M577	HB FM Mtc	Fld arty Bn	Fld arty Batt 2	Firing Plt 2	Fire Direction Center 2		
350	*	10.439	35.215	Mech Inf Bn 1 Task Force	3	Cbt train	M577	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt trains CP Element	
351	*	10.542	35.211	Mech Inf Bn 1 Task Force	2	Cbt train	M577	HB FM Mtc	Mech Inf Bn 1	HHC		S-4 Sec	Cbt trains CP Element	
352	*	9.847	34.756	Mech Inf Bn 1 Task Force	2	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
353	*	9.795	34.854	Mech Inf Bn 1 Task Force	3	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 2	
354	*	9.400	34.859	Mech Inf Bn 1 Task Force	3	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 2	
355	*	9.202	34.854	Mech Inf Bn 1 Task Force	3	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 2	
356	*	9.597	34.855	Mech Inf Bn 1 Task Force	3	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 2	
357	*	9.958	34.753	Mech Inf Bn 1 Task Force	2	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
358	*	9.902	34.755	Mech Inf Bn 1 Task Force	2	Maint	Vehicle-Medium/M88A	HB FM Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
359	*	11.002	43.509	Mech Inf Bn 1 Task Force	3	2 TFA	M113	HB FM Mtc	Eng Bn	Eng Co 2		Co HQ		
360	*	10.802	43.554	Mech Inf Bn 1 Task Force	2	2 TFA	M113	HB FM Mtc	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 1		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
361	*	10.504	43.454	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 1
362	*	10.700	43.455	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 2
363	*	10.602	43.452	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 3
364	*	10.697	43.555	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 4
365	*	10.602	43.552	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 5
366	*	10.800	43.458	Mech Inf Bn 1 Task Force	2	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 1	Plt HQ 1		
367	*	10.312	36.012	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	M113	HB FM M1C		Air Def arty Batt	Gun Plt	Gun Plt HQ		
368	*	9.151	34.844	Mech Inf Bn 1 Task Force	6	Maint	M13	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt		AA Co Maint Team	
369	*	9.245	34.850	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
370	*	9.849	34.846	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
371	*	9.454	34.847	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
372	*	9.657	34.844	Mech Inf Bn 1 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
373	*	9.654	34.760	Mech Inf Bn 1 Task Force	2	Maint	M113	HB FM M1C	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
374	*	8.159	40.133	Mech Inf Bn 1 Task Force	1+1+2	fwd	M113	HB FM M1C	Mech Inf Bn 1	HHC		S-3 Sec	Tac CP Element	
375	*	5.995	40.009	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 1	Rifle Co 3		HQ		
376	*	8.601	38.608	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 1	Rifle Co 4		HQ		
377	*	13.799	38.606	Mech Inf Bn 1 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 2	Rifle Co 1		HQ		
378	*	12.946	44.119	Mech Inf Bn 1 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 1	AA Co	AA Plt			
379	*	13.418	44.125	Mech Inf Bn 1 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 1	AA Co	AA Plt			
380	*	8.551	48.736	Mech Inf Bn 1 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 1	AA Co	AA Plt			
381	*	13.080	44.070	Mech Inf Bn 1 Task Force	4	line	M113	HB FM M1C	Mech Inf Bn 1	AA Co		HQ		
382	*	10.502	43.550	Mech Inf Bn 1 Task Force	8	2 TFA	M113	HB FM M1C	Eng Bn	Eng Co 2	Eng Plt 2			Eng Sqd 6
383	*	12.997	44.208	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 1	AA Co	AA Plt			
384	*	13.103	44.210	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 1	AA Co	AA Plt			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
385	*	13.289	44.213	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
386	*	13.391	44.213	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
387	*	13.494	44.207	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
388	*	13.593	44.209	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
389	*	8.402	48.806	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
390	*	8.502	48.805	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
391	*	8.597	48.809	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
392	*	8.687	48.815	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
393	*	12.796	44.209	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
394	*	12.895	44.207	Mech Inf Bn 1 Task Force	4	line	ITV-TOW	HB FM Mtc	Mech Inf Bn 1	AA Co	AA Plt			
395	*	12.071	41.392	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM Mtc		Air Def arty Batt	Gun Plt			Gun Sqd
396	*	7.343	34.892	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM Mtc		Air Def arty Batt	Gun Plt			Gun Sqd
397	*	6.245	42.315	Mech Inf Bn 1 Task Force	4	2 TFA	Vulcan	HB FM Mtc		Air Def arty Batt	Gun Plt			Gun Sqd
398	*	10.803	48.912	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM Mtc			GSR Plt 1			GSR SQUAD 2
399	*	10.805	48.820	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM Mtc			GSR Plt 1			GSR SQUAD 2
400	*	10.305	43.500	Mech Inf Bn 1 Task Force	8	2 TFA	2 CEV (2 in 1 icon)	HB FM Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 2		
401	*	10.488	34.904	Mech Inf Bn 1 Task Force	4	2 TFA	2 AVLB (2 in 1 icon)	HB FM Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 1		
402	*	8.483	42.185	Mech Inf Bn 1 Task Force	4	2 TFA	2 AVLB (2 in 1 icon)	HB FM Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Assault Sec 1		
403	*	17.533	17.964	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec		
404	*	8.632	38.599	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM Mtc	Mech Inf Bn 1	Rifle Co 4		HQ		
405	*	6.029	40.000	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM Mtc	Mech Inf Bn 1	Rifle Co 3		HQ		
406	*	8.557	38.597	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM Mtc	Mech Inf Bn 1	Rifle Co 4		HQ		
407	*	5.956	39.995	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM Mtc	Mech Inf Bn 1	Rifle Co 3		HQ		
408	*	7.498	33.193	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Ammo Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
409	*	7.495	33.301	Mech Inf Bn 1 Task Force	3	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Batt HQ		
410	*	7.348	33.199	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec		
411	*	7.593	33.198	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec		
412	*	7.544	33.193	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec		
413	*	7.449	33.194	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec		
414	*	7.397	33.194	Mech Inf Bn 1 Task Force	2	2 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Ammo Sec		
415	*	10.934	19.408	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element	
416	*	10.830	19.411	BSA Task Force	4	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		S-1 Sec		
417	*	10.539	19.417	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
418	*	10.002	34.741	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		
419	*	9.449	34.744	Mech Inf Bn 1 Task Force	6	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
420	*	9.594	34.747	Mech Inf Bn 1 Task Force	3	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
421	*	9.500	34.743	Mech Inf Bn 1 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
422	*	9.550	34.743	Mech Inf Bn 1 Task Force	4	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
423	*	9.746	34.743	Mech Inf Bn 1 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec		
424	*	9.999	34.841	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 1	
425	*	9.094	34.839	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		AA Co Maint Team	
426		17.792	17.981	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ		
427	*	10.899	43.495	Mech Inf Bn 1 Task Force	3	2 TFA	Truck	HB BSA MtC	Eng Bn	Eng Co 2		Co HQ		
428		10.680	19.415	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec		
429	*	9.319	34.836	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
430	*	9.524	34.841	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
431	*	9.718	34.838	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
432	*	9.924	34.837	Mech Inf Bn 1 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt		Rifle Co Maint Team 4	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
433	10.303	19.491	BSA Task Force	12	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Mess Sec			
434	10.899	19.599	BSA Task Force	4	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec			
435	10.142	19.505	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Mess Sec			
436 *	9.398	34.746	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
437	10.737	19.413	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
438 *	9.347	34.743	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
439 *	9.291	34.746	Mech Inf Bn 1 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
440 *	9.241	34.744	Mech Inf Bn 1 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
441	10.876	19.412	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 1	HHC		Co HQ	Fld trains CP Element		
442 *	10.519	35.124	Mech Inf Bn 1 Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
443 *	13.757	38.595	Mech Inf Bn 1 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
444 *	13.837	38.595	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 1		HQ			
445 *	11.396	39.192	Mech Inf Bn 1 Task Force	2	Co rear	Truck	HB FM MtC	Tank Bn	Tank Co 3		HQ Sec			
446 *	8.756	42.197	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
447 *	11.477	42.193	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
448 *	13.375	40.781	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
449 *	10.139	35.972	Mech Inf Bn 1 Task Force	2	2 TF HHC Area	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
450 *	6.473	43.754	Mech Inf Bn 1 Task Force	2	2 TFA Co	HMMWV armed w/Stinger	HB FM MtC		Air Def arty Batt	Missile Plt			Missile Team	
451 *	10.924	42.076	Mech Inf Bn 1 Task Force	4	2 TFA	2 Volcano (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec			
452 *	6.691	34.005	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
453 *	6.594	33.998	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
454 *	6.492	34.000	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
455 *	6.396	34.000	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			
456 *	7.099	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM MtC	Fld arty Bn	Fld arty Batt 2		Howitzer Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
457	*	6.895	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
458	*	6.998	33.999	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
459	*	6.795	34.002	Mech Inf Bn 1 Task Force	5	2 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
460	*	10.998	37.310	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
461	*	11.194	37.313	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
462	*	10.901	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
463	*	11.290	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
464	*	10.798	37.311	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
465	*	11.394	37.314	Mech Inf Bn 1 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad
466	*	6.639	43.834	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB			Mech Inf FIST Tm 1	
467	*	13.496	40.835	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB			Mech Inf FIST Tm 2	
468	*	8.855	42.261	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB			Mech Inf FIST Tm 3	
469	*	11.547	42.255	Mech Inf Bn 1 Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB			Mech Inf FIST Tm 4	
470	*	6.894	33.898	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
471	*	6.689	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
472	*	6.593	33.896	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
473	*	6.490	33.893	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
474	*	6.395	33.892	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
475	*	7.098	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
476	*	10.198	43.507	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec		
477	*	7.000	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
478	*	6.794	33.899	Mech Inf Bn 1 Task Force	4	2 TFA	Cargo Carrier/M548	HB FM Mtc	Fld arty Bn	Fld arty Batt 2		Howitzer Sec		
479		17.571	18.054	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA Mtc	Eng Bn	Eng Co 2	Asl & Obs Plt	Obstacle Sec		
480		10.628	19.424	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA Mtc	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
481	10.584	19.424	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
482	10.901	19.512	BSA Task Force	8	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Tean			
483	10.709	19.515	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Tean			
484	10.498	19.606	BSA Task Force	5	Fld train	HEMMT (5 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec			
485	10.531	19.509	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Class III & V Tean			
486	10.713	19.620	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 1	HHC	Bn Sprt Plt	Trans Sec			
487	* 9.791	34.749	Mech Inf Bn 1 Task Force	1	Maint	Wrecker HEMMT	HB FM MtC	Mech Inf Bn 1	HHC	Bn Maint Plt	Sprt Sec			
488	* 10.392	35.134	Mech Inf Bn 1 Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
489	* 10.439	35.132	Mech Inf Bn 1 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
490	* 10.400	35.010	Mech Inf Bn 1 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			
491	* 10.597	35.018	Mech Inf Bn 1 Task Force	14	Cbt train	Ambulances (7 in 1 icon)	HB FM MtC	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			
492	* 19.800	28.015	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
493	* 19.703	28.010	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
494	* 19.604	28.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
495	* 19.401	28.008	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
496	* 19.304	28.008	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
497	* 19.200	28.005	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
498	* 19.110	28.004	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
499	* 10.008	26.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
500	* 9.802	26.009	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
501	* 9.695	26.007	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
502	* 9.900	26.010	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt				
503	* 19.730	27.915	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec			
504	* 18.916	27.909	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4		HQ Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
505	*	19.895	28.013	Mech Inf Bn 2 Task Force	4	line	M1	HB FM MtC	Tank Bn	Tank Co 4	Tank Plt			
506	*	19.740	24.595	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element	
507	*	18.109	24.003	Mech Inf Bn 2 Task Force	2	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-4 Sec	Cbt trains CP Element	
508		12.495	19.399	BSA Task Force	3+2	Fld train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Sprt Plt	HQ Sec		
509	*	19.643	24.526	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Main CP Element	
510	*	19.854	24.626	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Main CP Element	
511	*	19.855	24.555	Mech Inf Bn 2 Task Force	1	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Main CP Element	
512	*	19.692	24.607	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element	
513	*	19.598	24.528	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Main CP Element	
514	*	18.007	24.004	Mech Inf Bn 2 Task Force	1	Cbt train	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element	
515	*	19.549	24.597	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		Co HQ	Main CP Element	
516	*	19.598	24.595	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		TACP Sec	Main CP Element	
517	*	16.593	22.938	Mech Inf Bn 2 Task Force	2	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
518		12.795	19.401	BSA Task Force	1	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
519	*	16.235	22.881	Mech Inf Bn 2 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Plt HQ		
520	*	16.298	22.879	Mech Inf Bn 2 Task Force	1	Maint	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Plt HQ		
521		12.999	19.402	BSA Task Force	2	Fld train	HMMWV	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element	
522	*	18.603	29.041	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Plt HQ		
523	*	18.604	28.948	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Plt HQ		
524		18.297	18.033	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 2		
525		18.296	17.953	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 2		
526		18.347	17.998	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	Eng Co 3		Co HQ		
527	*	22.263	25.840	Mech Inf Bn 2 Task Force	2	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Plt HQ		
528	*	22.309	25.843	Mech Inf Bn 2 Task Force	1	Bn rear	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Plt HQ		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
529	*	12.419	23.835	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ		
530	*	12.505	23.827	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ		
531	*	12.816	23.833	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ		
532	*	12.902	23.829	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3	Firing Plt 1	Plt HQ		
533	*	11.899	23.292	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Commo Sec		
534	*	11.910	23.358	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Batt HQ		
535	*	11.983	23.357	Mech Inf Bn 2 Task Force	2	3 TFA	HMMWV	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Batt HQ		
536	*	21.399	26.009	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 4		HQ		
537	*	21.395	25.895	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 4		HQ		
538	*	19.362	25.995	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 4		HQ Sec		
539	*	19.426	25.990	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Tank Bn	Tank Co 4		HQ Sec		
540	*	16.793	26.005	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 3		HQ		
541	*	16.793	25.881	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 3		HQ		
542	*	9.000	24.005	Mech Inf Bn 2 Task Force	1	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 2		HQ		
543	*	8.999	24.119	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	Rifle Co 2		HQ		
544	*	14.356	28.099	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	AA Co		HQ		
545	*	14.394	28.098	Mech Inf Bn 2 Task Force	2	Co rear	HMMWV	HB FM Mtc	Mech Inf Bn 2	AA Co		HQ		
546	*	19.549	24.524	Mech Inf Bn 2 Task Force	3	3 TF HHC Area	HMMWV	HB FM Mtc		Air Def arty Batt	Missile Plt	Missile Sec		
547	*	18.194	23.907	Mech Inf Bn 2 Task Force	2	Cbt train	HMMWV	HB FM Mtc	Mech Inf Bn 2	HHC	Bn Med Plt	Plt HQ		
548	*	18.195	24.003	Mech Inf Bn 2 Task Force	5	Cbt train	HMMWV	HB FM Mtc	Mech Inf Bn 2	HHC		S-1 Sec		
549	*	19.642	24.595	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM Mtc	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element	
550	*	17.921	24.011	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM Mtc	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element	
551	*	17.953	24.010	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM Mtc	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element	
552	*	17.984	24.006	Mech Inf Bn 2 Task Force	1	Cbt train	Motorcycle	HB FM Mtc	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #		X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
553	*	21.448	28.530	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ			
554	*	22.592	28.608	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
555	*	22.490	28.608	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
556	*	22.395	28.610	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
557	*	22.291	28.610	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
559	*	21.996	28.605	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
560	*	21.900	28.606	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
561	*	21.782	28.607	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
562	*	21.586	28.605	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
563	*	21.490	28.608	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
564	*	21.392	28.609	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
565	*	21.297	28.609	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4	Rifle Plt				
566	*	18.896	28.003	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
567	*	18.792	28.006	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
568	*	18.698	28.005	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
569	*	18.591	28.007	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt				
570	*	16.849	27.921	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
571	*	16.373	27.920	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ			
572	*	17.502	28.010	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
573	*	17.394	28.011	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
574	*	17.295	28.008	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
575	*	17.196	28.011	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
576	*	16.999	28.008	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				
577	*	16.891	28.005	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt				

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
578	*	16.792	28.007	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
579	*	16.699	28.004	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
580	*	16.495	28.006	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
581	*	16.394	28.009	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
582	*	16.290	28.015	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
583	*	16.196	28.010	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 3	Rifle Plt			
584	*	9.325	25.906	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ		
585	*	8.911	25.905	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ		
586	*	9.496	26.011	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
587	*	9.392	26.009	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
588	*	9.297	26.006	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
589	*	9.197	26.004	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
590	*	9.003	26.012	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
591	*	8.898	26.006	Mech Inf Bn 2 Task Force	4	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
592	*	8.795	26.012	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
593	*	8.686	26.009	Mech Inf Bn 2 Task Force	9	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 2	Rifle Plt			
594	*	21.294	28.215	Mech Inf Bn 2 Task Force	3	fwd	M2	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Tac CP Element	
595	*	21.351	28.210	Mech Inf Bn 2 Task Force	5	fwd	M2	HB FM MtC	Mech Inf Bn 2	HHC		Bn HQ Sec	Tac CP Element	
596	*	21.971	28.519	Mech Inf Bn 2 Task Force	3	line	M2	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ		
597	*	9.898	28.997	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section		
598	*	9.956	28.928	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	HQ Sec		
599	*	10.308	28.998	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section		
600	*	10.203	28.998	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section		
601	*	10.260	28.932	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	HQ Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
602	*	9.995	29.002	Mech Inf Bn 2 Task Force	5	fwd	M3	HB FM MtC	Mech Inf Bn 2	HHC	Bn Scout Plt	Scout Section		
603	*	19.799	24.606	Mech Inf Bn 2 Task Force	6	Bn HHC	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-3 Sec	Main CP Element	
604	*	22.504	25.918	Mech Inf Bn 2 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Sec HQ		
605	*	22.106	25.906	Mech Inf Bn 2 Task Force	3	Bn rear	M577	HB FM MtC	Mech Inf Bn 2	HHC	Hvy Mort Plt	Mort Sec HQ		
606	*	12.460	23.842	Mech Inf Bn 2 Task Force	8	3 TFA	M577	HB BSA MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 2	Fire Direction Center 1		
607	*	12.857	23.843	Mech Inf Bn 2 Task Force	8	3 TFA	M577	HB BSA MtC	Fld arty Bn	Fld arty Batt 3	Firing Plt 2	Fire Direction Center 2		
608	*	18.150	24.013	Mech Inf Bn 2 Task Force	2	Cbt train	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-4 Sec	Cbt trains CP Element	
609	*	19.796	24.536	Mech Inf Bn 2 Task Force	4	Bn HHC	M577	HB FM MtC	Mech Inf Bn 2	HHC		S-2 Sec	Main CP Element	
610	*	18.058	24.013	Mech Inf Bn 2 Task Force	3	Cbt train	M577	HB FM MtC	Mech Inf Bn 2	HHC	Bn Commo Plt		Cbt trains CP Element	
611	*	16.692	23.013	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2
612	*	16.746	22.942	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
613	*	16.797	22.945	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
614	*	16.850	22.948	Mech Inf Bn 2 Task Force	2	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
615	*	16.101	23.000	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2
616	*	16.299	23.015	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2
617	*	16.494	23.007	Mech Inf Bn 2 Task Force	3	Maint	Vehicle- Medium/M88A	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 2
618	*	16.642	23.012	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3
619	*	16.849	23.009	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt			Rifle Co Maint Team 3
620	*	16.549	22.933	Mech Inf Bn 2 Task Force	2	Maint	M113	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
621	*	18.699	29.056	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 1
622	*	18.700	28.951	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 2
623	*	18.803	29.056	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 3
624	*	18.800	28.952	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 4
625	*	18.895	29.057	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM MtC	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 5

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
626	*	18.894	28.945	Mech Inf Bn 2 Task Force	8	3 TFA	M113	HB FM M1C	Eng Bn	Eng Co 3	Eng Plt 2			Eng Sqd 6
627	*	19.005	29.055	Mech Inf Bn 2 Task Force	2	3 TFA	M113	HB FM M1C	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 1		
628	*	19.003	28.949	Mech Inf Bn 2 Task Force	2	3 TFA	M113	HB FM M1C	Eng Bn	Eng Co 3	Eng Plt 1	Plt HQ 1		
629	*	19.193	29.006	Mech Inf Bn 2 Task Force	3	3 TFA	M113	HB FM M1C	Eng Bn	Eng Co 3		Co HQ		
630	*	21.326	28.133	Mech Inf Bn 2 Task Force	1+1+2	fwd	M113	HB FM M1C	Mech Inf Bn 2	HHC		S-3 Sec	Tac CP Element	
631	*	21.401	25.959	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 2	Rifle Co 4		HQ		
632	*	16.794	25.948	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 2	Rifle Co 3		HQ		
633	*	9.003	24.067	Mech Inf Bn 2 Task Force	2	Co rear	M113	HB FM M1C	Mech Inf Bn 2	Rifle Co 2		HQ		
634	*	14.486	28.839	Mech Inf Bn 2 Task Force	4	line	M113	HB FM M1C	Mech Inf Bn 2	AA Co		HQ		
635	*	13.851	28.915	Mech Inf Bn 2 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
636	*	14.853	28.922	Mech Inf Bn 2 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
637	*	14.327	28.917	Mech Inf Bn 2 Task Force	3	line	M113	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
638	*	16.050	23.000	Mech Inf Bn 2 Task Force	6	Maint	M13	HB FM M1C	Mech Inf Bn 2	HHC	Bn Maint Plt		AA Co Maint Team	
639	*	16.241	23.016	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
640	*	16.446	23.003	Mech Inf Bn 2 Task Force	4	Maint	M113	HB FM M1C	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 3	
641	*	14.697	29.012	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
642	*	14.497	29.005	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
643	*	14.397	29.006	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
644	*	14.295	29.014	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
645	*	14.193	29.009	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
646	*	14.000	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
647	*	13.910	29.002	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
648	*	13.802	29.011	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			
649	*	13.698	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM M1C	Mech Inf Bn 2	AA Co	AA Plt			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
650	*	15.002	28.999	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt			
651	*	14.906	29.008	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt			
652	*	14.799	29.006	Mech Inf Bn 2 Task Force	4	line	ITV-TOW	HB FM MtC	Mech Inf Bn 2	AA Co	AA Plt			
653	*	11.009	29.807	Mech Inf Bn 2 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2			GSR SQUAD 1
654	*	11.011	29.702	Mech Inf Bn 2 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC			GSR Plt 2			GSR SQUAD 1
655	*	18.499	29.000	Mech Inf Bn 2 Task Force	8	3 TFA	2 CEV (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 2		
656	*	17.757	23.952	Mech Inf Bn 2 Task Force	4	3 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 1		
657	*	9.201	25.784	Mech Inf Bn 2 Task Force	4	3 TFA	2 AVLB (2 in 1 icon)	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Assault Sec 1		
658		18.138	17.962	BSA Task Force	7	FSB	7 ACE (7 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
659	*	21.433	25.945	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ		
660	*	21.362	25.950	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 4		HQ		
661	*	11.945	23.287	Mech Inf Bn 2 Task Force	3	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Batt HQ		
662	*	16.562	22.997	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
663	*	16.365	22.998	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
664	*	16.164	22.999	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
665	*	18.125	23.910	Mech Inf Bn 2 Task Force	2	Cbt train	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station		
666		12.931	19.598	BSA Task Force	4	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Sprt Plt	Trans Sec		
667		12.317	19.491	BSA Task Force	12	Fld train	4 Trucks (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Mess Sec		
668	*	11.795	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		
669	*	11.842	23.201	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		
670	*	11.895	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		
671	*	11.946	23.198	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		
672	*	11.994	23.199	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		
673	*	12.039	23.196	Mech Inf Bn 2 Task Force	2	3 TFA	Truck	HB FM MtC	Fld arty Bn	Fld arty Batt 3		Ammo Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
674	*	19.101	28.996	Mech Inf Bn 2 Task Force	3	3 TFA	Truck	HB FM MtC	Eng Bn	Eng Co 3		Co HQ		
675		18.397	17.990	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	Eng Co 3		Co HQ		
676		12.192	19.492	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Mess Sec		
677		12.542	19.394	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
678		12.890	19.406	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element	
679		12.956	19.406	BSA Task Force	2	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		Co HQ	Fld trains CP Element	
680	*	16.296	22.933	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
681	*	16.235	22.940	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
682	*	16.190	22.928	Mech Inf Bn 2 Task Force	1	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
683	*	16.896	22.930	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
684	*	16.136	22.929	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
685	*	16.641	22.928	Mech Inf Bn 2 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
686	*	16.494	22.924	Mech Inf Bn 2 Task Force	3	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
687	*	16.440	22.920	Mech Inf Bn 2 Task Force	4	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
688	*	16.390	22.926	Mech Inf Bn 2 Task Force	5	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
689	*	16.350	22.931	Mech Inf Bn 2 Task Force	6	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Maint/SVC Sec		
690	*	16.896	23.000	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team1	
691	*	16.001	22.991	Mech Inf Bn 2 Task Force	2	Maint	Truck	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		AA Co Maint Team	
692		12.685	19.399	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
693		12.747	19.397	BSA Task Force	1	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Admin Sec		
694		12.838	19.408	BSA Task Force	4	Fld train	Truck	HB BSA MtC	Mech Inf Bn 2	HHC		S-1 Sec		
695	*	8.972	24.054	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 2		HQ		
696	*	16.767	22.987	Mech Inf Bn 2 Task Force	4	Maint	2 Trucks (2 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt		Rifle Co Maint Team 4	
697	*	16.828	25.940	Mech Inf Bn 2 Task Force	1	Co rear	Truck	HB FM MtC	Mech Inf Bn 2	Rifle Co 3		HQ		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
698	*	9.029	24.053	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM Mtc	Mech Inf Bn 2	Rifle Co 2		HQ		
699	*	16.757	25.938	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM Mtc	Mech Inf Bn 2	Rifle Co 3		HQ		
700	*	19.394	25.992	Mech Inf Bn 2 Task Force	2	Co rear	Truck	HB FM Mtc	Tank Bn	Tank Co 4		HQ Sec		
701	*	19.317	24.557	Mech Inf Bn 2 Task Force	2	3 TF HHC Area	HMMWV armed w/Stinger	HB FM Mtc		Air Def arty Batt	Missile Plt		Missile Team	
702	*	22.076	28.418	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM Mtc		Air Def arty Batt	Missile Plt		Missile Team	
703	*	18.813	27.821	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM Mtc		Air Def arty Batt	Missile Plt		Missile Team	
704	*	9.445	25.819	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM Mtc		Air Def arty Batt	Missile Plt		Missile Team	
705	*	17.004	27.820	Mech Inf Bn 2 Task Force	2	3 TFA Co	HMMWV armed w/Stinger	HB FM Mtc		Air Def arty Batt	Missile Plt		Missile Team	
706	*	21.720	28.201	Mech Inf Bn 2 Task Force	4	3 TFA	2 Volcano (2 in 1 icon)	HB FM Mtc	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
707	*	12.902	24.008	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
708	*	12.999	24.009	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
709	*	12.395	24.004	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
710	*	12.311	24.005	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
711	*	12.600	24.007	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
712	*	12.497	24.007	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
713	*	12.695	24.010	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
714	*	12.801	24.013	Mech Inf Bn 2 Task Force	5	3 TFA	155mm SP howitzer	HB FM Mtc	Fld arty Bn	Fld arty Batt 3		Howitzer Sec		
715	*	22.588	26.007	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
716	*	22.004	26.006	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
717	*	22.104	26.006	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
718	*	22.503	26.012	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
719	*	22.392	26.009	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
720	*	22.186	26.003	Mech Inf Bn 2 Task Force	4	Bn rear	4.2 inch M106A2	HB FM Mtc	Mech Inf Bn 2	HHC	Hvy Mort Plt			Mortar Squad
721	*	19.546	27.857	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM Mtc	Fld arty Bn	HHB			Mech Inf FIST Tm 5	

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Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
722	*	17.115	27.880	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB			Mech Inf FIST Tm 6	
723	*	9.493	25.876	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB			Mech Inf FIST Tm 7	
724	*	22.161	28.479	Mech Inf Bn 2 Task Force	4	line	M113/FIST-V	HB FM MtC	Fld arty Bn	HHB			Mech Inf FIST Tm 8	
725	*	12.805	23.915	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
726	*	12.900	23.910	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
727	*	12.997	23.909	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
728	*	12.313	23.904	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
729	*	18.395	29.001	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
730	*	12.394	23.906	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
731	*	12.497	23.905	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
732	*	12.598	23.906	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
733	*	12.698	23.904	Mech Inf Bn 2 Task Force	4	3 TFA	Cargo Carrier/M548	HB FM MtC	Fld arty Bn	Fld arty Batt 3	Howitzer Sec			
734		18.172	18.053	BSA Task Force	4	FSB	flatbet (4 in 1 icon)	HB BSA MtC	Eng Bn	Eng Co 3	Asl & Obs Plt	Obstacle Sec		
735		12.647	19.408	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
736		12.592	19.404	BSA Task Force	1	Fld train	5 ton wrecker	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
737		12.719	19.510	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team		
738		12.927	19.510	BSA Task Force	8	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team		
739		12.496	19.604	BSA Task Force	5	Fld train	HEMMT (5 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC	Bn Sprt Plt	Trans Sec		
740		12.521	19.496	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Class III & V Team		
741		12.723	19.598	BSA Task Force	4	Fld train	HEMMT (4 in 1 icon)	HB BSA MtC	Mech Inf Bn 2	HHC		Trans Sec		
742	*	16.695	22.940	Mech Inf Bn 2 Task Force	1	Maint	Wrecker HEMMT	HB FM MtC	Mech Inf Bn 2	HHC	Bn Maint Plt	Sprt Sec		
743	*	18.009	23.927	Mech Inf Bn 2 Task Force	4	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station		
744	*	18.059	23.922	Mech Inf Bn 2 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Aid Station		
745	*	18.002	23.818	Mech Inf Bn 2 Task Force	14	Cbt train	Ambulances (7 in 1 icon)	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Evac Sec		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
746	*	18.194	23.815	Mech Inf Bn 2 Task Force	3	Cbt train	M577 Ambulance	HB FM MtC	Mech Inf Bn 2	HHC	Bn Med Plt	Evac Sec		
747		15.000	16.755	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		S1 Sec	Rear CP Element	
748		21.435	21.006	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element	
749		21.543	21.007	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element	
750		21.396	20.948	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
751		21.435	20.949	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
752		21.345	20.949	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element	
753		21.483	21.080	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Bde FSE Sec		
754		21.432	21.073	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		TACP Sec	Main CP Element	
755		14.953	16.709	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		Co HQ	Rear CP Element	
756		21.227	21.010	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Co HQ	Main CP Element	
757		21.394	21.073	BSA Task Force	4	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element	
758		21.397	21.007	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Bde AD Sec	Main CP	
759		14.954	16.752	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		S1 Sec	Rear CP Element	
760		14.400	15.346	BSA Task Force	2	FSB	HMMWV	HB BSA MtC		Air Def arty Batt	MSCS Plt	Plt HQ		
761		17.998	18.471	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn		Sprt Plt	Sprt Plt HQ		
762		14.929	14.860	BSA Task Force	4	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC		Air Def arty Batt		Batt HQ		
763		15.357	15.405	BSA Task Force	3	FSB	HMMWV	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Plt HQ		
764		21.197	20.955	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ		
765		21.195	21.014	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Sec		
766		14.298	15.349	BSA Task Force	9	FSB	3 HMMWV (3 in 1 icon)	HB BSA MtC		Air Def arty Batt	MSCS Plt	Sys Maint Sec		
767		17.905	18.470	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec		
768		18.003	14.798	BSA Task Force	7	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt		Batt HQ		
769		21.345	21.006	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		S-4 Sec	Main CP Element	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
770	18.800	19.002	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Co HQ			
771	18.674	18.999	BSA Task Force	4+3	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Admin/Log Sec			
772	18.736	18.998	BSA Task Force	4+4	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Admin/Log Sec			
773	18.870	19.061	BSA Task Force	6	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Op/Planning Sec			
774	17.506	14.808	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt		Maint Plt HQ			
775	18.651	19.059	BSA Task Force	8	FSB	2 HMMWV (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Commo Sec			
776	17.999	14.606	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	Svc Batt		Ammo Plt HQ			
777	18.950	19.002	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Commd Sec			
778	18.793	15.558	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB				Unit Ministry Team	
779	21.348	21.077	BSA Task Force	3	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element		
780	18.842	15.405	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Batt HQ			
781	21.287	20.950	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC						FM Retrans Team	
782	18.636	15.483	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec			
783	18.794	15.483	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Plt HQ			
784	18.591	15.481	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec			
785	18.685	15.488	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec			
786	18.543	15.483	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Wire Sec			
787	18.902	15.479	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec			
788	18.949	15.474	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec			
789	18.949	15.405	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Commd Sec			
790	18.844	15.477	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec			
791	18.996	15.472	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Survey Sec			
792	18.997	15.406	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Commd Sec			
793	18.439	15.487	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
794	18.489	15.483	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec			
795	18.739	15.483	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Plt HQ			
796	21.289	21.080	BSA Task Force	2	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element		
797	21.236	21.082	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Commo Sec	Rear CP Element		
798	18.846	15.549	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB				Pers/Admin Cen	
799	18.400	15.488	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Commo Plt	Radio Sec			
800	16.425	15.736	BSA Task Force	18	FSB	6 HMMWV (6 in 1 icon)	HB BSA MtC			MP Plt				2 MP Sqds
801	16.249	15.746	BSA Task Force	3	FSB	HMMWV	HB BSA MtC			MP Plt	HQ			
802	*	20.902	Tank Bn Task Force	2	Bn HHC	HMMWV	HB BSA MtC	Tank Bn	HHC		S-3 Sec	(Carried On arty Bn TOE)		
803	*	10.543	Mech Inf Bn 1 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 1	HHC		FSE Section			
804		18.624	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Eng Bn	HHQ		Asst Bde Engr Sec			
805		18.490	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB	Survey Plt	Plt HQ			
806	*	19.743	Mech Inf Bn 2 Task Force	2	Bn HHC	HMMWV	HB FM MtC	Mech Inf Bn 2	HHC		FSE Section			
807		21.591	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Cmd Sec	Main CP Element		
808		21.594	BSA Task Force	1	Bde HHC	HMMWV	HB BSA MtC	Bde HQ	HHC		Cmd Sec	Main CP Element		
809		14.896	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Bde HQ	HHC		Fast Section	Rear CP		
810	*	24.214	Tank Bn Task Force	18	fwd	gen (6 in 1 icon)	HB FM MtC			Smoke Plt				2 Smoke Sqds (6 tms)
811		15.001	BSA Task Force	3	FSB	M577	HB BSA MtC	Bde HQ	HHC		Commo Sec	Main CP Element		
812		14.851	BSA Task Force	5	FSB	M577	HB BSA MtC	Bde HQ	HHC		S-4 Sec	Rear CP Element		
813		14.991	BSA Task Force	2	FSB	M577	HB BSA MtC		Air Def arty Batt		Batt HQ			
814		18.952	BSA Task Force	6	FSB	2 M577 (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ		Op/Planning Sec			
815		18.545	BSA Task Force	4	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Intel Sec			
816		18.738	BSA Task Force	5	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Fire Dir Sec			
817		21.482	BSA Task Force	5	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element		

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
818	21.543	20.952	BSA Task Force	5	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		S3 Sec	Main CP Element		
819	21.488	21.012	BSA Task Force	4	Bde HHC	M557	HB BSA MtC	Bde HQ	HHC		S2 Sec	Main CP Element		
820	21.279	21.019	BSA Task Force	4	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		Bde Eng Sec	Main CP		
821	21.543	21.086	BSA Task Force	2	Bde HHC	M577	HB BSA MtC	Bde HQ	HHC		Bde FSE Sec			
822	*	20.589	39.903	Tank Bn Task Force	4+2+2	fwd	M577	HB FM MtC	Bde HQ	HHC		S3 Sec	Tac CP Element	
823	17.948	18.476	BSA Task Force	2	FSB	Vehicle-Medium/M88A	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec			
824	14.955	16.670	BSA Task Force	3	FSB	Vehicle-Medium/M88A	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element		
825	14.848	16.661	BSA Task Force	3	FSB	Vehicle-Medium/M88A	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element		
826	14.800	16.654	BSA Task Force	3	FSB	Vehicle-Medium/M88A	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element		
827	14.894	16.655	BSA Task Force	3	FSB	Vehicle-Medium/M88A	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element		
828	15.029	18.531	BSA Task Force	3	FSB	M113	HB BSA MtC			ADA Plt (from Corps)	Plt HQ			
829	*	20.592	39.807	Tank Bn Task Force	6+2	fwd	M113	HB FM MtC	Bde HQ	HHC		Cmd Sec	Tac CP Element	
830	21.234	20.953	BSA Task Force	2	Bde HHC	M113	HB BSA MtC		Air Def arty Batt	Gun Plt	Gun Plt HQ			
831	18.999	19.004	BSA Task Force	5	FSB	M113	HB BSA MtC	Eng Bn	HHQ		Commnd Sec			
832	18.739	19.068	BSA Task Force	4	FSB	M113	HB BSA MtC	Eng Bn	HHQ		Tac Sec			
833	*	24.194	42.802	Tank Bn Task Force	3	fwd	M113	HB FM MtC			Smoke Plt	Plt HQ		
834	21.402	20.598	BSA Task Force	4	Bde HHC	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt				Gun Sqd
835	10.184	20.652	BSA Task Force	4	FSB	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt				Gun Sqd
836	15.895	13.986	BSA Task Force	4	FSB	Vulcan	HB BSA MtC		Air Def arty Batt	Gun Plt				Gun Sqd
837	*	20.946	36.123	Tank Bn Task Force	2	Bn HHC	CoLT	HB FM MtC	Tank Bn	HHC		S-3 Sec	(Carried On arty Bn TOE)	
838	*	10.494	35.913	Mech Inf Bn 1 Task Force	2	Bn HHC	CoLT	HB FM MtC	Mech Inf Bn 1	HHC		FSE Section		
839	*	19.695	24.541	Mech Inf Bn 2 Task Force	2	Bn HHC	CoLT	HB FM MtC	Mech Inf Bn 2	HHC		FSE Section		
840	*	21.078	35.990	Tank Bn Task Force	4	1 TFA	Chaparral	HB FM MtC			ADA Plt (from Corps)			Chaparral Sqds
841	*	10.649	35.769	Mech Inf Bn 1 Task Force	4	2 TFA	Chaparral	HB FM MtC			ADA Plt (from Corps)			Chaparral Sqds

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
842	*	19.723	24.211	Mech Inf Bn 2 Task Force	4	3 TFA	Chaparral	HB FM MtC		ADA Plt (from Corps)				Chaparral Sqds
843		15.002	18.612	BSA Task Force	4	FSB	Chaparral	HB BSA MtC		ADA Plt (from Corps)				Chaparral Sqds
844	*	11.003	48.819	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC		GSR Plt 2				GSR SQUAD 2
845	*	11.000	48.912	Mech Inf Bn 1 Task Force	3	fwd	M113 with AN/PPS-5	HB FM MtC		GSR Plt 2				GSR SQUAD 2
846		17.548	14.720	BSA Task Force	33	FSB	3 Trucks (3 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt			3 FB Maint Tms	
847		17.452	14.713	BSA Task Force	7	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt	SVC Batt Maint Sec			
848		17.619	14.598	BSA Task Force	28	FSB	14 Trucks (14 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt	2 Ammo Secs			
849		17.847	14.523	BSA Task Force	14	FSB	7 Trucks (7 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt	Ammo Sec			
850		17.645	14.519	BSA Task Force	5	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt	Food Svc Sec			
851		17.522	14.526	BSA Task Force	16	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt	Food Svc Sec			
852		17.775	18.473	BSA Task Force	40	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC	Eng Bn	Sprt Plt	Bn Maint Sec			
853		14.322	15.398	BSA Task Force	16	FSB	4 Trucks (4 in 1 icon)	HB BSA MtC	Air Def arty Batt	MSCS Plt	Motor Maint Sec			
854		17.942	18.391	BSA Task Force	2	FSB	Truck	HB BSA MtC	Eng Bn	Sprt Plt	Transp Sec			
855		17.799	18.399	BSA Task Force	5	FSB	5 Trucks (5 in 1 icon)	HB BSA MtC	Eng Bn	Sprt Plt	Transp Sec			
856		17.750	14.796	BSA Task Force	9	FSB	9 Trucks (9 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt	Bn Supply Sec			
857		14.991	14.782	BSA Task Force	10	FSB	5 Trucks (5 in 1 icon)	HB BSA MtC	Air Def arty Batt		Batt HQ			
858		18.573	19.060	BSA Task Force	12	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ	Food Serv Sec			
859		18.800	19.065	BSA Task Force	3	FSB	Truck	HB BSA MtC	Eng Bn	HHQ	Op/Planning Sec			
860		18.868	18.997	BSA Task Force	4	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC	Eng Bn	HHQ	Co HQ			
861		18.943	15.543	BSA Task Force	2+4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB			Treatment Tm	
862		18.900	15.398	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB	Batt HQ			
863		14.959	18.529	BSA Task Force	2	FSB	Truck	HB BSA MtC		ADA Plt (from Corps)	Plt HQ			
864		17.794	14.710	BSA Task Force	24	FSB	3 Trucks (3 in 1 icon)	HB BSA MtC	Fld arty Bn	Svc Batt	Bn Maintenance Sec			
865		18.790	15.396	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB	Batt HQ			

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Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
866	15.393	15.391	BSA Task Force	1	FSB	Truck	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Plt HQ			
867	15.299	15.393	BSA Task Force	1	FSB	Truck	HB BSA MtC		Air Def arty Batt	Missile Plt	Missile Plt HQ			
868	17.645	14.717	BSA Task Force	10	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt				HQ Batt Maint. Tm	
869	14.796	16.695	BSA Task Force	3	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Maint Sec	Rear CP Element		
870	18.683	15.404	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB		Fire Dir Sec			
871	15.186	16.535	BSA Task Force	4	FSB	2 Trucks (2 in 1 icon)	HB BSA MtC			Smoke Plt				Sppt Sqd
872	17.453	14.800	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fld arty Bn	Svc Batt		Maint Plt HQ			
873	18.898	15.544	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fld arty Bn	HHB				Pers/Admin Cen	
874	14.892	16.705	BSA Task Force	3	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Co HQ	Rear CP Element		
875	14.798	16.747	BSA Task Force	5	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Mess Sec			
876	14.848	16.708	BSA Task Force	4	FSB	Truck	HB BSA MtC	Bde HQ	HHC		Maint Sec	Rear CP Element		
877	*	14.600	51.517	Mech Inf Bn 1 Task Force	3	fwd	HMMWV with AN/TRQ-30	HB FM MtC				CoLLECTION TEAM		
878	21.082	20.967	BSA Task Force	2	Bde HHC	HMMWV arme d w/Stinger	HB BSA MtC		Air Def arty Batt	Missile Plt			Missile Team	
879	17.501	20.109	BSA Task Force	2	FSB	HMMWV arme d w/Stinger	HB BSA MtC		Air Def arty Batt	Missile Plt			Missile Team	
880	11.112	13.965	BSA Task Force	2	FSB	HMMWV arme d w/Stinger	HB BSA MtC		Air Def arty Batt	Missile Plt			Missile Team	
881	11.315	20.000	BSA Task Force	2	FSB	HMMWV arme d w/Stinger	HB BSA MtC		Air Def arty Batt	Missile Plt			Missile Team	
882	19.020	13.167	BSA Task Force	2	FSB	HMMWV arme d w/Stinger	HB BSA MtC		Air Def arty Batt	Missile Plt			Missile Team	
883	17.944	14.715	BSA Task Force	6	FSB	Vehicles- Light/M578 (3	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Maintenance Sec			
884	15.000	16.667	BSA Task Force	3	FSB	Vehicle- Light/M578	HB BSA MtC	Bde HQ	HHC		Maint Sec	Main CP Element		
885	17.712	14.726	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fld arty Bn	Svc Batt		Bn Maintenance Sec			
886	17.630	18.485	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Eng Bn		Sprt Plt	Bn Maint Sec			
887	18.486	15.329	BSA Task Force	3	FSB	HEMMT (3 in 1 icon)	HB BSA MtC	Fld arty Bn	HHB				Fld trains	
888	14.197	15.362	BSA Task Force	1	FSB	2-1/2 ton van- shop	HB BSA MtC		Air Def arty Batt	MSCS Plt	Sys Maint Sec			
889	18.997	15.547	BSA Task Force	2	FSB	HMMWV ambulance	HB BSA MtC	Fld arty Bn	HHB				Treatment Tm	

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Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
890	18.440	15.406	BSA Task Force	2	Bde HHC	HMMWV ambulance	HB BSA MtC	Fld arty Bn	HHB				Amb. Team	
891	11.792	14.752	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commo Br			
892	11.741	14.747	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Sprt Op Sec			
893	11.645	14.745	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		S-4 Sec			
894	11.596	14.742	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment				Unit Ministry Team	
895	10.238	14.607	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ			
896	10.093	14.596	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ			
897	9.997	14.603	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Plt HQ			
898	10.039	15.353	BSA Task Force	7	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Class V (ATP) Sec			
899	10.234	14.997	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec			
900	16.022	13.496	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt	Plt HQ			
901	16.245	13.555	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ			
902	9.797	15.202	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section			
903	16.394	13.557	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ			
904	19.152	16.827	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Co HQ			
905	15.501	13.490	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt	Plt HQ			
906	19.286	16.899	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec			
907	19.194	16.828	BSA Task Force	6	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Co HQ			
908	19.152	16.901	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Plt HQ			
909	18.885	16.902	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Armt Maint Rep Sec			
910	19.239	16.901	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec			
911	17.490	16.998	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co				Eng System Sprt Team	
912	18.695	16.902	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Plt HQ			
913	17.539	17.001	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordance Co				Eng System Sprt Team	

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
914	18.004	17.005	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
915	17.953	16.928	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec			
916	18.006	16.927	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec			
917	18.056	16.923	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec			
918	18.099	16.922	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
919	17.894	16.929	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec			
920	12.051	14.750	BSA Task Force	5	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commd Sec			
921	12.100	14.746	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commd Sec			
922	12.000	14.751	BSA Task Force	2	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		PAC Sec			
923	11.948	14.751	BSA Task Force	3	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		PAC Sec			
924	11.897	14.751	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Plans-Ops Br			
925	11.847	14.752	BSA Task Force	1	FSB	HMMWV	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Commo Br			
926	15.144	16.924	BSA Task Force	2	FSB	HMMWV	HB FM MtC			GSR Plt 1	Plt HQ			
927	18.594	15.407	BSA Task Force	4	FSB	HMMWV	HB BSA MtC	Fld arty Bn	HHB		Ops Sec			
928	15.195	16.924	BSA Task Force	2	FSB	HMMWV	HB FM MtC			GSR Plt 2	Plt HQ			
929	16.150	13.561	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Squad
930	16.107	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Squad
931	16.056	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Squad
932	16.003	13.559	BSA Task Force	4	FSB	M577	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Squad
933	18.637	15.415	BSA Task Force	4	FSB	M577	HB BSA MtC	Fld arty Bn	HHB		Ops Sec			
934	17.893	16.999	BSA Task Force	2	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
935	18.196	17.004	BSA Task Force	3	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
936	17.843	17.001	BSA Task Force	2	FSB	M113	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
937	9.754	15.194	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
938	9.699	15.192	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section			
939	9.654	15.193	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section			
940	16.341	13.548	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ			
941	16.289	13.547	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ			
942	15.976	13.476	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt	Plt HQ			
943	19.301	16.815	BSA Task Force	16	FSB	4 Truck (4 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordnance Co		Co HQ			
944	15.744	13.549	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Patient Holding Sqd
945	15.789	13.555	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Patient Holding Sqd
946	10.190	14.595	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ			
947	10.142	14.596	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ			
948	10.195	14.995	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec			
949	18.996	16.900	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Armt Maint Rep Sec			
950	18.521	16.997	BSA Task Force	12	FSB	12 Truck (12 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordnance Co		Class I* Sprt Sec			
951	18.949	16.902	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Armt Maint Rep Sec			
952	18.150	17.000	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
953	18.055	17.000	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
954	18.098	16.998	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
955	18.498	16.900	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Grd Sprt Equip Rep Sec			
956	17.792	17.000	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
957	17.746	16.997	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
958	17.696	16.997	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
959	18.643	16.902	BSA Task Force	9	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Svc/Recovery Sec			
960	18.452	16.901	BSA Task Force	4	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Grd Sprt Equip Rep Sec			
961	18.400	16.901	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
962	18.350	16.901	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
963	18.299	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
964	18.250	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
965	18.196	16.903	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
966	18.145	16.907	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Elect Equip Rep Sec			
967	17.841	16.917	BSA Task Force	1	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	MSL Maint Rep Sec			
968	11.844	14.672	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
969	11.788	14.673	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
970	12.047	14.672	BSA Task Force	3	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
971	11.992	14.668	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
972	11.942	14.671	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
973	11.892	14.671	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Detachment HQ			
974	10.352	15.004	BSA Task Force	2	FSB	Semi-trailer flatbed	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec			
975	10.399	15.002	BSA Task Force	2	FSB	Semi-trailer flatbed	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec			
976	19.263	16.995	BSA Task Force	6	FSB	flatbed (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Class I* Sprt Sec			
977	9.723	15.287	BSA Task Force	10	FSB	POL (10 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Supply Co		Petroleum Section			
978	19.336	16.911	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec			
979	10.298	15.004	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Supply Co		Supply Sec			
980	19.390	16.905	BSA Task Force	2	FSB	Semi-trailer van	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Maint Control Sec			
981	18.972	16.996	BSA Task Force	6	FSB	van (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordance Co		Class I* Sprt Sec			
982	16.198	13.556	BSA Task Force	2	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Med Co		Co HQ			
983	10.044	14.609	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Supply Co		Co HQ			
984	18.538	16.909	BSA Task Force	2	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Svc/Recovery Sec			
985	18.587	16.905	BSA Task Force	2	FSB	Truck	HB BSA MtC	Fwd Sprt Bn	Ordance Co	Grd Sprt Equip Plt	Svc/Recovery Sec			

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Table B2
Brigade Description by Icon Number
Heavy Brigade, Movement to Contact

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Area	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
986	17.597	17.004	BSA Task Force	1	FSB	5 ton wrecker	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
987	9.999	15.357	BSA Task Force	7	FSB	5 ton tractor	HB BSA MtC	Fwd Sprt Bn	Supply Co		Class V (ATP) Sec			
988	17.649	17.006	BSA Task Force	2	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				Eng System Sprt Team	
989	15.839	13.561	BSA Task Force	4	FSB	5 ton van	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Area Sppt Sqd
990	15.892	13.562	BSA Task Force	4	FSB	5 ton van	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Sqd, Area
991	15.941	13.557	BSA Task Force	4	FSB	5 ton van	HB BSA MtC	Fwd Sprt Bn	Med Co	Trmt Plt				Treatment Sqd, Area
992	18.792	16.910	BSA Task Force	6	FSB	vans (3 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Armt Maint Rep Sec			
993	19.192	16.912	BSA Task Force	3	FSB	5 ton van	HB BSA MtC	Fwd Sprt Bn	Ordnance Co		Maint Control Sec			
994	19.043	16.912	BSA Task Force	8	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Autmv Maint Rep Sec			
995	11.693	14.753	BSA Task Force	2	FSB	5 ton van	HB BSA MtC	Fwd Sprt Bn	HQ & HQ Detachment		Sprt Op Sec			
996	19.096	16.911	BSA Task Force	7	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordnance Co	Aumtv/Armt Plt	Autmv Maint Rep Sec			
997	17.947	17.000	BSA Task Force	2	FSB	2-1/2 ton van	HB BSA MtC	Fwd Sprt Bn	Ordnance Co				arty Sprt Team	
998	15.618	13.553	BSA Task Force	8	FSB	ambulance (4 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt				2 Amb Sqds, wheel
999	15.370	13.551	BSA Task Force	12	FSB	Ambulance (6 in 1 icon)	HB BSA MtC	Fwd Sprt Bn	Med Co	Amb. Plt				3 Ambl Sqds, track

* Icons not considered in scenario "Heavy Brigade, Brigade Support Area Task Force, Movement to Contact."

Figure B1
Brigade Layout by Task Force
Heavy Brigade, Movement to Contact

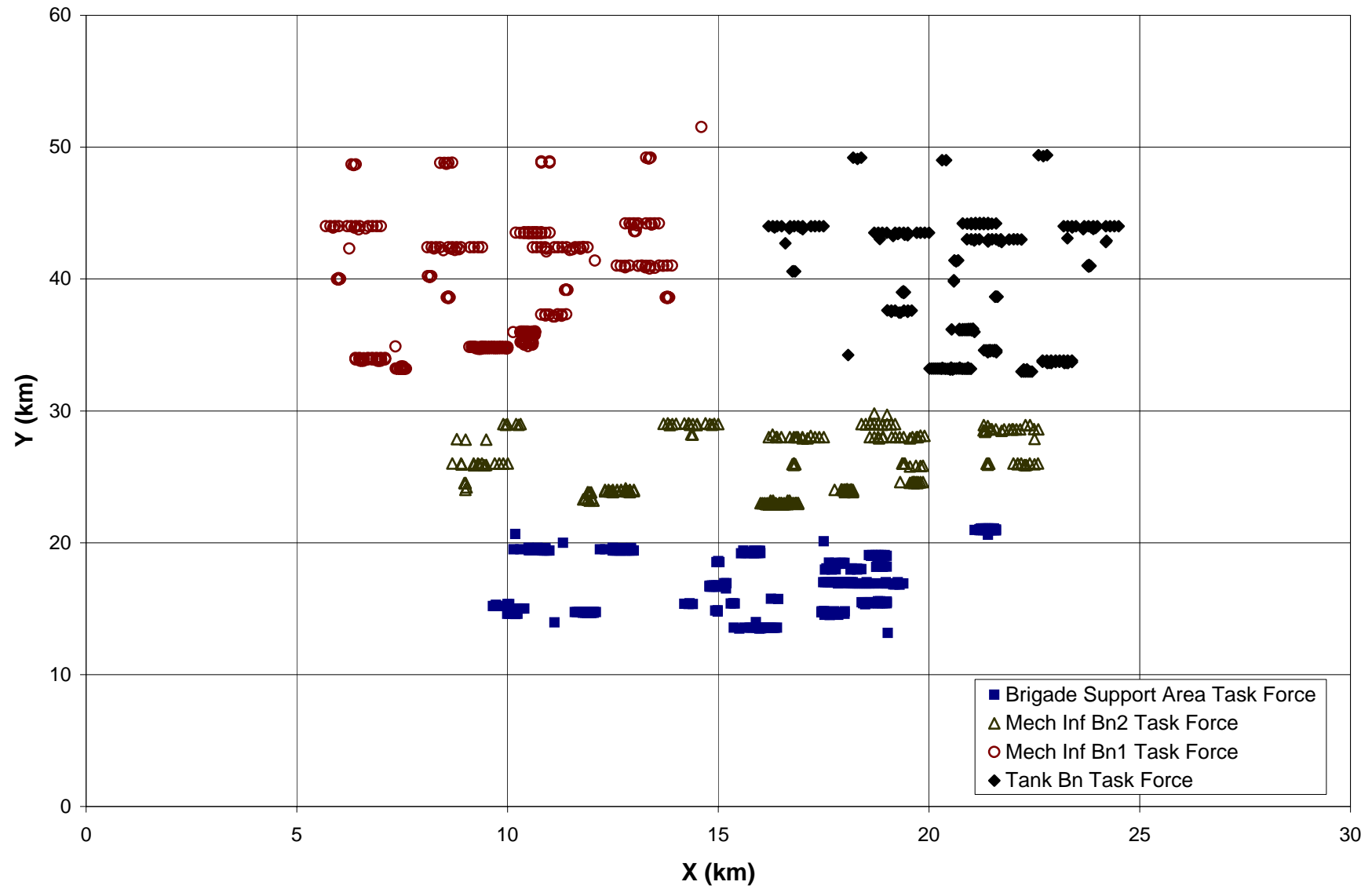


Figure B2
Unit Layout: Standard Scale
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

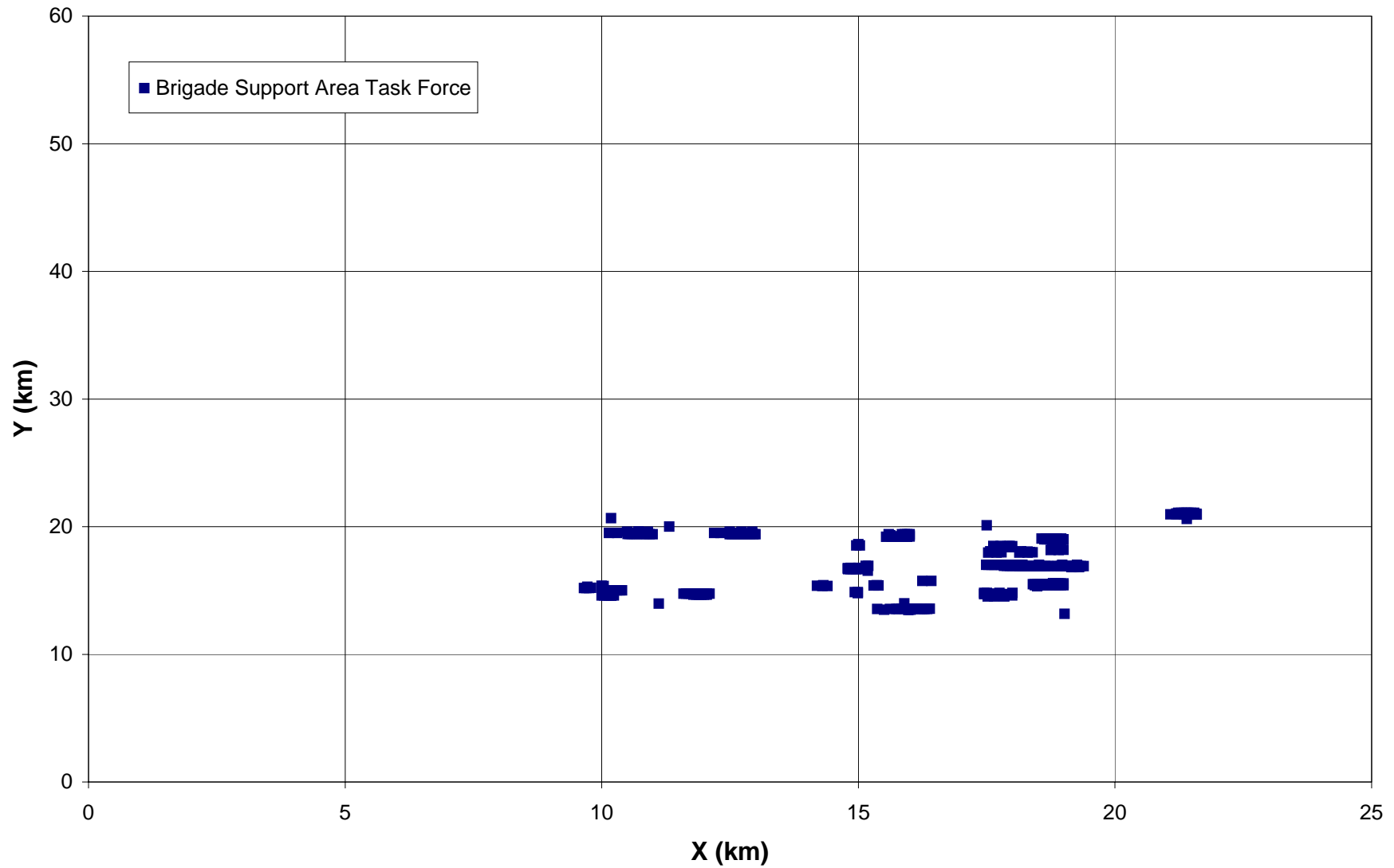


Figure B3
Unit Layout: Small Scale
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

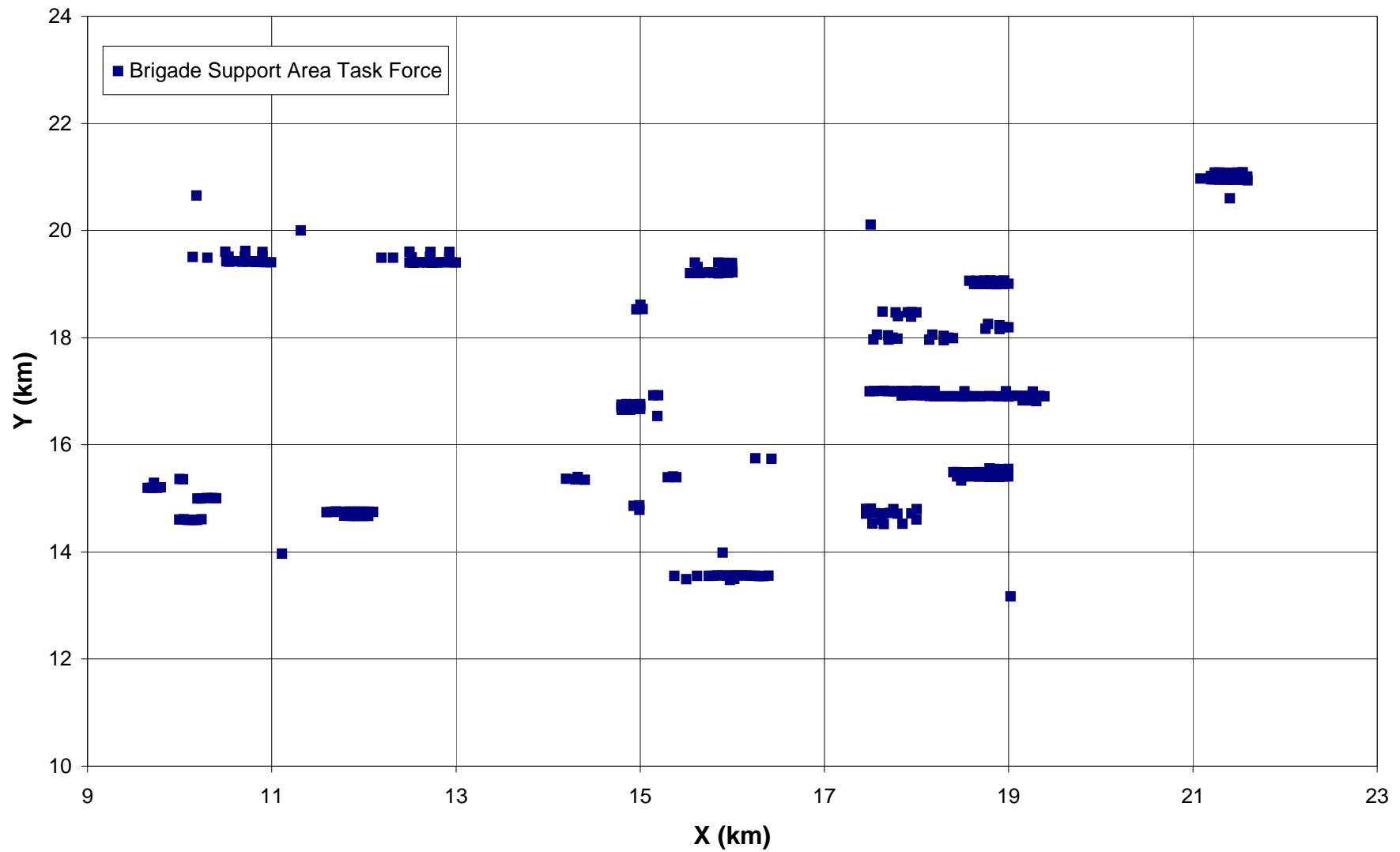


Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Sarin (GB) 152mm Artillery

Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected			18 rounds at aimpoint (17.60, 15.45)								
846	17.548	14.720	33	6.32E+00	0.00E+00	6.32E+00	6.32E+00	0.00E+00	2.78E-02	6.35E+00	4
848	17.619	14.598	28	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
868	17.645	14.717	10	3.51E+01	0.00E+00	3.51E+01	3.51E+01	0.00E+00	1.54E-01	3.53E+01	6
Case 2: Protected			18 rounds at aimpoint (17.80, 18.50)								
284	17.741	17.997	2	0.00E+00	0.00E+00	0.00E+00	7.44E-01	0.00E+00	3.27E-03	3.27E-03	1
426	17.792	17.981	3	0.00E+00	0.00E+00	0.00E+00	2.93E+00	0.00E+00	1.29E-02	1.29E-02	1
767	17.905	18.470	4	1.04E+01	0.00E+00	1.04E+01	1.24E+01	0.00E+00	5.46E-02	1.05E+01	4
852	17.775	18.473	40	5.03E+00	0.00E+00	5.03E+00	1.49E+02	0.00E+00	6.56E-01	5.69E+00	3
855	17.799	18.399	5	5.02E+01	0.00E+00	5.02E+01	4.38E+02	0.00E+00	1.93E+00	5.21E+01	7

Sarin (GB) MRLS

Moderate Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (17.80, 16.80)							
768	18.003	14.798	7	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
774	17.506	14.808	6	9.60E+00	0.00E+00	9.60E+00	9.60E+00	0.00E+00	4.22E-02	9.64E+00	4
776	17.999	14.606	4	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
846	17.548	14.720	33	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
847	17.452	14.713	7	3.43E+00	0.00E+00	3.43E+00	3.43E+00	0.00E+00	1.51E-02	3.45E+00	3
848	17.619	14.598	28	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
849	17.847	14.523	14	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
850	17.645	14.519	5	9.76E+00	0.00E+00	9.76E+00	9.76E+00	0.00E+00	4.29E-02	9.80E+00	4
851	17.522	14.526	16	4.63E+00	0.00E+00	4.63E+00	4.63E+00	0.00E+00	2.04E-02	4.65E+00	3
856	17.75	14.796	9	2.89E+01	0.00E+00	2.89E+01	2.89E+01	0.00E+00	1.27E-01	2.90E+01	5
864	17.794	14.710	24	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
868	17.645	14.717	10	2.00E+01	0.00E+00	2.00E+01	2.00E+01	0.00E+00	8.80E-02	2.01E+01	5
872	17.453	14.800	1	4.41E+00	0.00E+00	4.41E+00	4.41E+00	0.00E+00	1.94E-02	4.43E+00	3
883	17.944	14.715	6	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5
885	17.712	14.726	1	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
911	17.49	16.998	2	1.32E+00	0.00E+00	1.32E+00	1.32E+00	0.00E+00	5.81E-03	1.33E+00	2
914	18.004	17.005	3	7.94E+00	0.00E+00	7.94E+00	7.94E+00	0.00E+00	3.49E-02	7.97E+00	4
915	17.953	16.928	3	2.73E+02	0.00E+00	2.73E+02	2.73E+02	0.00E+00	1.20E+00	2.74E+02	8
916	18.006	16.927	3	2.37E+02	0.00E+00	2.37E+02	2.37E+02	0.00E+00	1.04E+00	2.38E+02	8
917	18.056	16.923	3	3.49E+02	0.00E+00	3.49E+02	3.49E+02	0.00E+00	1.54E+00	3.51E+02	8
918	18.099	16.922	4	2.14E+02	0.00E+00	2.14E+02	2.14E+02	0.00E+00	9.42E-01	2.15E+02	8
919	17.894	16.929	2	3.17E+02	0.00E+00	3.17E+02	3.17E+02	0.00E+00	1.39E+00	3.18E+02	8
934	17.893	16.999	2	2.82E+02	0.00E+00	2.82E+02	2.82E+02	0.00E+00	1.24E+00	2.83E+02	8
936	17.843	17.001	2	3.09E+02	0.00E+00	3.09E+02	3.09E+02	0.00E+00	1.36E+00	3.10E+02	8
953	18.055	17.000	3	2.26E+00	0.00E+00	2.26E+00	2.26E+00	0.00E+00	9.94E-03	2.27E+00	2
954	18.098	16.998	3	5.26E+00	0.00E+00	5.26E+00	5.26E+00	0.00E+00	2.31E-02	5.28E+00	3
956	17.792	17.000	2	8.37E+02	0.00E+00	8.37E+02	8.37E+02	0.00E+00	3.68E+00	8.41E+02	8
957	17.746	16.997	2	5.85E+02	0.00E+00	5.85E+02	5.85E+02	0.00E+00	2.57E+00	5.88E+02	8
958	17.696	16.997	2	1.76E+02	0.00E+00	1.76E+02	1.76E+02	0.00E+00	7.74E-01	1.77E+02	8
967	17.841	16.917	1	5.49E+02	0.00E+00	5.49E+02	5.49E+02	0.00E+00	2.42E+00	5.51E+02	8
986	17.597	17.004	1	4.22E+00	0.00E+00	4.22E+00	4.22E+00	0.00E+00	1.86E-02	4.24E+00	3
988	17.649	17.006	2	6.71E+02	0.00E+00	6.71E+02	6.71E+02	0.00E+00	2.95E+00	6.74E+02	8
997	17.947	17.000	2	3.45E+02	0.00E+00	3.45E+02	3.45E+02	0.00E+00	1.52E+00	3.47E+02	8
Case 2: Protected				240 rounds at aimpoint (17.90, 14.55)							
768	18.003	14.798	7	4.14E-01	0.00E+00	4.14E-01	1.68E+02	0.00E+00	7.39E-01	1.15E+00	2
776	17.999	14.606	4	4.60E+01	0.00E+00	4.60E+01	6.48E+02	0.00E+00	2.85E+00	4.89E+01	6
848	17.619	14.598	28	1.81E+02	0.00E+00	1.81E+02	4.86E+02	0.00E+00	2.14E+00	1.83E+02	8
849	17.847	14.523	14	5.40E+01	0.00E+00	5.40E+01	3.53E+02	0.00E+00	1.55E+00	5.56E+01	7
850	17.645	14.519	5	7.34E+01	0.00E+00	7.34E+01	2.68E+02	0.00E+00	1.18E+00	7.46E+01	7
856	17.75	14.796	9	2.76E+02	0.00E+00	2.76E+02	3.93E+02	0.00E+00	1.73E+00	2.78E+02	8
864	17.794	14.710	24	1.86E+01	0.00E+00	1.86E+01	2.87E+02	0.00E+00	1.26E+00	1.99E+01	5
868	17.645	14.717	10	9.50E+00	0.00E+00	9.50E+00	1.15E+02	0.00E+00	5.06E-01	1.00E+01	4
883	17.944	14.715	6	1.30E+02	0.00E+00	1.30E+02	3.71E+02	0.00E+00	1.63E+00	1.32E+02	8
885	17.712	14.726	1	1.54E+00	0.00E+00	1.54E+00	6.31E+01	0.00E+00	2.78E-01	1.82E+00	2

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Sarin (GB) MRLS Heavy Attack Height of Release: 0m											
				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 720 rounds at airtpoint (17.95, 17.90)											
282	17.696	17.960	2	4.83E+02	0.00E+00	4.83E+02	4.83E+02	0.00E+00	2.13E+00	4.85E+02	8
284	17.741	17.997	2	4.88E+02	0.00E+00	4.88E+02	4.88E+02	0.00E+00	2.15E+00	4.90E+02	8
285	17.693	18.039	2	4.42E+02	0.00E+00	4.42E+02	4.42E+02	0.00E+00	1.94E+00	4.44E+02	8
403	17.533	17.964	7	4.40E+02	0.00E+00	4.40E+02	4.40E+02	0.00E+00	1.94E+00	4.42E+02	8
426	17.792	17.981	3	3.87E+02	0.00E+00	3.87E+02	3.87E+02	0.00E+00	1.70E+00	3.89E+02	8
479	17.571	18.054	4	3.11E+02	0.00E+00	3.11E+02	3.11E+02	0.00E+00	1.37E+00	3.12E+02	8
524	18.297	18.033	2	2.90E+02	0.00E+00	2.90E+02	2.90E+02	0.00E+00	1.28E+00	2.91E+02	8
525	18.296	17.953	2	3.45E+02	0.00E+00	3.45E+02	3.45E+02	0.00E+00	1.52E+00	3.47E+02	8
526	18.347	17.998	2	4.94E+02	0.00E+00	4.94E+02	4.94E+02	0.00E+00	2.17E+00	4.96E+02	8
658	18.138	17.962	7	3.01E+02	0.00E+00	3.01E+02	3.01E+02	0.00E+00	1.32E+00	3.02E+02	8
675	18.397	17.990	3	3.45E+02	0.00E+00	3.45E+02	3.45E+02	0.00E+00	1.52E+00	3.47E+02	8
734	18.172	18.053	4	2.20E+02	0.00E+00	2.20E+02	2.20E+02	0.00E+00	9.68E-01	2.21E+02	8
761	17.998	18.471	4	3.31E+01	0.00E+00	3.31E+01	3.31E+01	0.00E+00	1.46E-01	3.32E+01	6
767	17.905	18.470	4	2.37E+01	0.00E+00	2.37E+01	2.37E+01	0.00E+00	1.04E-01	2.38E+01	5
768	18.003	14.798	7	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
774	17.506	14.808	6	5.94E+00	0.00E+00	5.94E+00	5.94E+00	0.00E+00	2.61E-02	5.97E+00	3
776	17.999	14.606	4	6.96E+00	0.00E+00	6.96E+00	6.96E+00	0.00E+00	3.06E-02	6.99E+00	4
782	18.636	15.483	5	1.59E+00	0.00E+00	1.59E+00	1.59E+00	0.00E+00	7.00E-03	1.60E+00	2
784	18.591	15.481	2	3.37E+00	0.00E+00	3.37E+00	3.37E+00	0.00E+00	1.48E-02	3.38E+00	3
785	18.685	15.488	5	4.04E-01	0.00E+00	4.04E-01	4.04E-01	0.00E+00	1.78E-03	4.06E-01	2
786	18.543	15.483	4	6.09E+00	0.00E+00	6.09E+00	6.09E+00	0.00E+00	2.68E-02	6.12E+00	4
793	18.439	15.487	3	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
794	18.489	15.483	3	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
795	18.739	15.483	5	2.45E-02	0.00E+00	2.45E-02	2.45E-02	0.00E+00	1.08E-04	2.46E-02	1
799	18.4	15.488	4	1.90E+01	0.00E+00	1.90E+01	1.90E+01	0.00E+00	8.36E-02	1.91E+01	5
805	18.49	15.405	3	9.58E+00	0.00E+00	9.58E+00	9.58E+00	0.00E+00	4.22E-02	9.62E+00	4
815	18.545	15.420	4	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
816	18.738	15.415	5	2.12E-02	0.00E+00	2.12E-02	2.12E-02	0.00E+00	9.33E-05	2.13E-02	1
823	17.948	18.476	2	3.83E+00	0.00E+00	3.83E+00	3.83E+00	0.00E+00	1.69E-02	3.85E+00	3
846	17.548	14.720	33	5.46E+00	0.00E+00	5.46E+00	5.46E+00	0.00E+00	2.40E-02	5.48E+00	3
847	17.452	14.713	7	3.16E+00	0.00E+00	3.16E+00	3.16E+00	0.00E+00	1.39E-02	3.17E+00	3
848	17.619	14.598	28	4.50E+00	0.00E+00	4.50E+00	4.50E+00	0.00E+00	1.98E-02	4.52E+00	3
849	17.847	14.523	14	4.71E+00	0.00E+00	4.71E+00	4.71E+00	0.00E+00	2.07E-02	4.73E+00	3
850	17.645	14.519	5	3.51E+00	0.00E+00	3.51E+00	3.51E+00	0.00E+00	1.54E-02	3.53E+00	3
851	17.522	14.526	16	2.24E+00	0.00E+00	2.24E+00	2.24E+00	0.00E+00	9.86E-03	2.25E+00	2
852	17.775	18.473	40	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
854	17.942	18.391	2	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.19E-01	2.71E+01	5
855	17.799	18.399	5	3.08E+01	0.00E+00	3.08E+01	3.08E+01	0.00E+00	1.36E-01	3.09E+01	6
856	17.75	14.796	9	9.94E+00	0.00E+00	9.94E+00	9.94E+00	0.00E+00	4.37E-02	9.98E+00	4
864	17.794	14.710	24	8.03E+00	0.00E+00	8.03E+00	8.03E+00	0.00E+00	3.53E-02	8.07E+00	4
868	17.645	14.717	10	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
870	18.683	15.404	4	3.64E-01	0.00E+00	3.64E-01	3.64E-01	0.00E+00	1.60E-03	3.66E-01	2
872	17.453	14.800	1	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
883	17.944	14.715	6	8.89E+00	0.00E+00	8.89E+00	8.89E+00	0.00E+00	3.91E-02	8.93E+00	4
885	17.712	14.726	1	7.96E+00	0.00E+00	7.96E+00	7.96E+00	0.00E+00	3.50E-02	8.00E+00	4
886	17.63	18.485	1	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
887	18.486	15.329	3	8.97E+00	0.00E+00	8.97E+00	8.97E+00	0.00E+00	3.95E-02	9.01E+00	4
890	18.44	15.406	2	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
911	17.49	16.998	2	8.52E+01	0.00E+00	8.52E+01	8.52E+01	0.00E+00	3.75E-01	8.56E+01	8
912	18.695	16.902	2	3.30E-02	0.00E+00	3.30E-02	3.30E-02	0.00E+00	1.45E-04	3.31E-02	1
913	17.539	17.001	2	1.03E+02	0.00E+00	1.03E+02	1.03E+02	0.00E+00	4.53E-01	1.03E+02	8
914	18.004	17.005	3	1.94E+02	0.00E+00	1.94E+02	1.94E+02	0.00E+00	8.54E-01	1.95E+02	8
915	17.953	16.928	3	1.65E+02	0.00E+00	1.65E+02	1.65E+02	0.00E+00	7.26E-01	1.66E+02	8
916	18.006	16.927	3	1.67E+02	0.00E+00	1.67E+02	1.67E+02	0.00E+00	7.35E-01	1.68E+02	8
917	18.056	16.923	3	1.53E+02	0.00E+00	1.53E+02	1.53E+02	0.00E+00	6.73E-01	1.54E+02	8
918	18.099	16.922	4	1.37E+02	0.00E+00	1.37E+02	1.37E+02	0.00E+00	6.03E-01	1.38E+02	8
919	17.894	16.929	2	1.58E+02	0.00E+00	1.58E+02	1.58E+02	0.00E+00	6.95E-01	1.59E+02	8
927	18.594	15.407	4	2.94E+00	0.00E+00	2.94E+00	2.94E+00	0.00E+00	1.29E-02	2.95E+00	2
933	18.637	15.415	4	1.39E+00	0.00E+00	1.39E+00	1.39E+00	0.00E+00	6.12E-03	1.40E+00	2
934	17.893	16.999	2	1.87E+02	0.00E+00	1.87E+02	1.87E+02	0.00E+00	8.23E-01	1.88E+02	8
935	18.196	17.004	3	1.36E+02	0.00E+00	1.36E+02	1.36E+02	0.00E+00	5.98E-01	1.37E+02	8
936	17.843	17.001	2	1.67E+02	0.00E+00	1.67E+02	1.67E+02	0.00E+00	7.35E-01	1.68E+02	8
950	18.521	16.997	12	2.29E+01	0.00E+00	2.29E+01	2.29E+01	0.00E+00	1.01E-01	2.30E+01	5
952	18.15	17.000	3	1.51E+02	0.00E+00	1.51E+02	1.51E+02	0.00E+00	6.64E-01	1.52E+02	8

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

953	18.055	17.000	3	1.81E+02	0.00E+00	1.81E+02	1.81E+02	0.00E+00	7.96E-01	1.82E+02	8
954	18.098	16.998	3	1.59E+02	0.00E+00	1.59E+02	1.59E+02	0.00E+00	7.00E-01	1.60E+02	8
955	18.498	16.900	4	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.31E-01	2.98E+01	5
956	17.792	17.000	2	1.75E+02	0.00E+00	1.75E+02	1.75E+02	0.00E+00	7.70E-01	1.76E+02	8
957	17.746	16.997	2	1.67E+02	0.00E+00	1.67E+02	1.67E+02	0.00E+00	7.35E-01	1.68E+02	8
958	17.696	16.997	2	1.60E+02	0.00E+00	1.60E+02	1.60E+02	0.00E+00	7.04E-01	1.61E+02	8
959	18.643	16.902	9	6.98E-01	0.00E+00	6.98E-01	6.98E-01	0.00E+00	3.07E-03	7.01E-01	2
960	18.452	16.901	4	5.23E+01	0.00E+00	5.23E+01	5.23E+01	0.00E+00	2.30E-01	5.25E+01	7
961	18.4	16.901	1	7.73E+01	0.00E+00	7.73E+01	7.73E+01	0.00E+00	3.40E-01	7.76E+01	8
962	18.35	16.901	1	1.04E+02	0.00E+00	1.04E+02	1.04E+02	0.00E+00	4.58E-01	1.04E+02	8
963	18.299	16.903	1	1.17E+02	0.00E+00	1.17E+02	1.17E+02	0.00E+00	5.15E-01	1.18E+02	8
964	18.25	16.903	1	1.21E+02	0.00E+00	1.21E+02	1.21E+02	0.00E+00	5.32E-01	1.22E+02	8
965	18.196	16.903	1	1.18E+02	0.00E+00	1.18E+02	1.18E+02	0.00E+00	5.19E-01	1.19E+02	8
966	18.145	16.907	1	1.26E+02	0.00E+00	1.26E+02	1.26E+02	0.00E+00	5.54E-01	1.27E+02	8
967	17.841	16.917	1	1.35E+02	0.00E+00	1.35E+02	1.35E+02	0.00E+00	5.94E-01	1.36E+02	8
984	18.538	16.909	2	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
985	18.587	16.905	2	5.11E+00	0.00E+00	5.11E+00	5.11E+00	0.00E+00	2.25E-02	5.13E+00	3
986	17.597	17.004	1	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8
988	17.649	17.006	2	1.44E+02	0.00E+00	1.44E+02	1.44E+02	0.00E+00	6.34E-01	1.45E+02	8
997	17.947	17.000	2	1.82E+02	0.00E+00	1.82E+02	1.82E+02	0.00E+00	8.01E-01	1.83E+02	8

Case 2: Protected 720 rounds at aimpoint (17.60, 15.30)

768	18.003	14.798	7	5.01E+01	0.00E+00	5.01E+01	3.74E+02	0.00E+00	1.65E+00	5.17E+01	7
774	17.506	14.808	6	6.28E+01	0.00E+00	6.28E+01	4.53E+02	0.00E+00	1.99E+00	6.48E+01	7
776	17.999	14.606	4	4.49E-05	0.00E+00	4.49E-05	1.91E+02	0.00E+00	8.40E-01	8.40E-01	2
846	17.548	14.720	33	4.64E+01	0.00E+00	4.64E+01	5.17E+02	0.00E+00	2.27E+00	4.87E+01	6
847	17.452	14.713	7	1.76E+02	0.00E+00	1.76E+02	5.81E+02	0.00E+00	2.56E+00	1.79E+02	8
848	17.619	14.598	28	6.96E+00	0.00E+00	6.96E+00	2.47E+02	0.00E+00	1.09E+00	8.05E+00	4
849	17.847	14.523	14	9.42E-02	0.00E+00	9.42E-02	1.42E+02	0.00E+00	6.25E-01	7.19E-01	2
850	17.645	14.519	5	3.19E+00	0.00E+00	3.19E+00	2.15E+02	0.00E+00	9.46E-01	4.14E+00	3
851	17.522	14.526	16	3.88E+00	0.00E+00	3.88E+00	2.37E+02	0.00E+00	1.04E+00	4.92E+00	3
856	17.75	14.796	9	1.41E+02	0.00E+00	1.41E+02	4.57E+02	0.00E+00	2.01E+00	1.43E+02	8
864	17.794	14.710	24	1.30E+01	0.00E+00	1.30E+01	2.76E+02	0.00E+00	1.21E+00	1.42E+01	4
868	17.645	14.717	10	4.39E+01	0.00E+00	4.39E+01	3.53E+02	0.00E+00	1.55E+00	4.55E+01	6
872	17.453	14.800	1	9.54E+01	0.00E+00	9.54E+01	5.32E+02	0.00E+00	2.34E+00	9.77E+01	8
883	17.944	14.715	6	1.39E+01	0.00E+00	1.39E+01	3.30E+02	0.00E+00	1.45E+00	1.54E+01	5
885	17.712	14.726	1	2.09E+01	0.00E+00	2.09E+01	4.18E+02	0.00E+00	1.84E+00	2.27E+01	5

Sarin (GB) 250kg Bomb
Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (17.65, 16.15)											
846	17.548	14.720	33	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
864	17.794	14.710	24	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
774	17.506	14.808	6	1.99E+01	0.00E+00	1.99E+01	1.99E+01	0.00E+00	8.76E-02	2.00E+01	5
856	17.75	14.796	9	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5
849	17.847	14.523	14	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
848	17.619	14.598	28	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
851	17.522	14.526	16	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
868	17.645	14.717	10	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
850	17.645	14.519	5	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
885	17.712	14.726	1	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
872	17.453	14.800	1	7.44E+00	0.00E+00	7.44E+00	7.44E+00	0.00E+00	3.27E-02	7.47E+00	4
847	17.452	14.713	7	7.00E+00	0.00E+00	7.00E+00	7.00E+00	0.00E+00	3.08E-02	7.03E+00	4
883	17.944	14.715	6	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3

Sarin (GB) 250kg Bomb
Moderate Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected				12 rounds at aimpoint (18.80, 19.05)							
38	18.902	18.161	2	7.85E+01	0.00E+00	7.85E+01	7.85E+01	0.00E+00	3.45E-01	7.88E+01	8

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

40	18.9	18.232	2	8.69E+01	0.00E+00	8.69E+01	8.69E+01	0.00E+00	3.82E-01	8.73E+01	8
42	18.948	18.195	2	8.37E+01	0.00E+00	8.37E+01	8.37E+01	0.00E+00	3.68E-01	8.41E+01	8
147	18.748	18.163	7	7.94E+01	0.00E+00	7.94E+01	7.94E+01	0.00E+00	3.49E-01	7.97E+01	8
154	18.999	18.190	3	8.18E+01	0.00E+00	8.18E+01	8.18E+01	0.00E+00	3.60E-01	8.22E+01	8
220	18.777	18.253	4	9.06E+01	0.00E+00	9.06E+01	9.06E+01	0.00E+00	3.99E-01	9.10E+01	8
770	18.8	19.002	2	8.53E+02	0.00E+00	8.53E+02	8.53E+02	0.00E+00	3.75E+00	8.57E+02	8
771	18.674	18.999	7	2.80E+02	0.00E+00	2.80E+02	2.80E+02	0.00E+00	1.23E+00	2.81E+02	8
772	18.736	18.998	8	2.12E+02	0.00E+00	2.12E+02	2.12E+02	0.00E+00	9.33E-01	2.13E+02	8
773	18.87	19.061	6	4.09E+02	0.00E+00	4.09E+02	4.09E+02	0.00E+00	1.80E+00	4.11E+02	8
775	18.651	19.059	8	2.17E+01	0.00E+00	2.17E+01	2.17E+01	0.00E+00	9.55E-02	2.18E+01	5
777	18.95	19.002	4	4.55E+01	0.00E+00	4.55E+01	4.55E+01	0.00E+00	2.00E-01	4.57E+01	6
778	18.793	15.558	1	6.08E+00	0.00E+00	6.08E+00	6.08E+00	0.00E+00	2.68E-02	6.11E+00	4
780	18.842	15.405	3	3.95E+00	0.00E+00	3.95E+00	3.95E+00	0.00E+00	1.74E-02	3.97E+00	3
782	18.636	15.483	5	3.34E+00	0.00E+00	3.34E+00	3.34E+00	0.00E+00	1.47E-02	3.35E+00	3
783	18.794	15.483	6	5.10E+00	0.00E+00	5.10E+00	5.10E+00	0.00E+00	2.24E-02	5.12E+00	3
784	18.591	15.481	2	2.34E+00	0.00E+00	2.34E+00	2.34E+00	0.00E+00	1.03E-02	2.35E+00	2
785	18.685	15.488	5	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
786	18.543	15.483	4	1.35E+00	0.00E+00	1.35E+00	1.35E+00	0.00E+00	5.94E-03	1.36E+00	2
787	18.902	15.479	2	5.07E+00	0.00E+00	5.07E+00	5.07E+00	0.00E+00	2.23E-02	5.09E+00	3
788	18.949	15.474	3	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.09E-02	4.78E+00	3
789	18.949	15.405	6	3.96E+00	0.00E+00	3.96E+00	3.96E+00	0.00E+00	1.74E-02	3.98E+00	3
790	18.844	15.477	2	4.83E+00	0.00E+00	4.83E+00	4.83E+00	0.00E+00	2.13E-02	4.85E+00	3
791	18.996	15.472	3	4.97E+00	0.00E+00	4.97E+00	4.97E+00	0.00E+00	2.19E-02	4.99E+00	3
792	18.997	15.406	5	3.85E+00	0.00E+00	3.85E+00	3.85E+00	0.00E+00	1.69E-02	3.87E+00	3
794	18.489	15.483	3	3.39E-01	0.00E+00	3.39E-01	3.39E-01	0.00E+00	1.49E-03	3.40E-01	2
795	18.739	15.483	5	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.12E-02	4.83E+00	3
798	18.846	15.549	4	5.93E+00	0.00E+00	5.93E+00	5.93E+00	0.00E+00	2.61E-02	5.96E+00	3
804	18.624	18.999	3	2.75E+02	0.00E+00	2.75E+02	2.75E+02	0.00E+00	1.21E+00	2.76E+02	8
805	18.49	15.405	3	1.61E-01	0.00E+00	1.61E-01	1.61E-01	0.00E+00	7.08E-04	1.62E-01	1
814	18.952	19.064	6	4.06E+01	0.00E+00	4.06E+01	4.06E+01	0.00E+00	1.79E-01	4.08E+01	6
815	18.545	15.420	4	1.13E+00	0.00E+00	1.13E+00	1.13E+00	0.00E+00	4.97E-03	1.13E+00	2
816	18.738	15.415	5	3.96E+00	0.00E+00	3.96E+00	3.96E+00	0.00E+00	1.74E-02	3.98E+00	3
831	18.999	19.004	5	7.23E+02	0.00E+00	7.23E+02	7.23E+02	0.00E+00	3.18E+00	7.26E+02	8
832	18.739	19.068	4	1.64E+02	0.00E+00	1.64E+02	1.64E+02	0.00E+00	7.22E-01	1.65E+02	8
858	18.573	19.060	12	4.07E+02	0.00E+00	4.07E+02	4.07E+02	0.00E+00	1.79E+00	4.09E+02	8
859	18.8	19.065	3	9.98E+02	0.00E+00	9.98E+02	9.98E+02	0.00E+00	4.39E+00	1.00E+03	8
860	18.868	18.997	4	3.21E+02	0.00E+00	3.21E+02	3.21E+02	0.00E+00	1.41E+00	3.22E+02	8
861	18.943	15.543	6	5.84E+00	0.00E+00	5.84E+00	5.84E+00	0.00E+00	2.57E-02	5.87E+00	3
862	18.9	15.398	2	3.78E+00	0.00E+00	3.78E+00	3.78E+00	0.00E+00	1.66E-02	3.80E+00	3
865	18.79	15.396	2	3.77E+00	0.00E+00	3.77E+00	3.77E+00	0.00E+00	1.66E-02	3.79E+00	3
870	18.683	15.404	4	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.48E-02	3.37E+00	3
873	18.898	15.544	4	5.87E+00	0.00E+00	5.87E+00	5.87E+00	0.00E+00	2.58E-02	5.90E+00	3
889	18.997	15.547	2	5.90E+00	0.00E+00	5.90E+00	5.90E+00	0.00E+00	2.60E-02	5.93E+00	3
904	19.152	16.827	6	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
906	19.286	16.899	3	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.66E-02	6.08E+00	4
907	19.194	16.828	6	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
908	19.152	16.901	2	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
909	18.885	16.902	2	2.72E+01	0.00E+00	2.72E+01	2.72E+01	0.00E+00	1.20E-01	2.73E+01	5
910	19.239	16.901	3	9.76E+00	0.00E+00	9.76E+00	9.76E+00	0.00E+00	4.29E-02	9.80E+00	4
912	18.695	16.902	2	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
927	18.594	15.407	4	1.91E+00	0.00E+00	1.91E+00	1.91E+00	0.00E+00	8.40E-03	1.92E+00	2
933	18.637	15.415	4	2.87E+00	0.00E+00	2.87E+00	2.87E+00	0.00E+00	1.26E-02	2.88E+00	2
943	19.301	16.815	16	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.09E-02	4.78E+00	3
949	18.996	16.900	2	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
950	18.521	16.997	12	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
951	18.949	16.902	2	2.75E+01	0.00E+00	2.75E+01	2.75E+01	0.00E+00	1.21E-01	2.76E+01	5
955	18.498	16.900	4	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
959	18.643	16.902	9	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
960	18.452	16.901	4	2.94E+00	0.00E+00	2.94E+00	2.94E+00	0.00E+00	1.29E-02	2.95E+00	2
961	18.4	16.901	1	8.75E-01	0.00E+00	8.75E-01	8.75E-01	0.00E+00	3.85E-03	8.79E-01	2
962	18.35	16.901	1	2.03E-05	0.00E+00	2.03E-05	2.03E-05	0.00E+00	8.93E-08	2.04E-05	1
976	19.263	16.995	6	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.60E-02	8.22E+00	4
978	19.336	16.911	2	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.35E-02	3.07E+00	3
980	19.39	16.905	2	8.49E-01	0.00E+00	8.49E-01	8.49E-01	0.00E+00	3.74E-03	8.53E-01	2
981	18.972	16.996	6	2.87E+01	0.00E+00	2.87E+01	2.87E+01	0.00E+00	1.26E-01	2.88E+01	5
984	18.538	16.909	2	8.91E+00	0.00E+00	8.91E+00	8.91E+00	0.00E+00	3.92E-02	8.95E+00	4
985	18.587	16.905	2	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
992	18.792	16.910	6	2.67E+01	0.00E+00	2.67E+01	2.67E+01	0.00E+00	1.17E-01	2.68E+01	5
993	19.192	16.912	3	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
994	19.043	16.912	8	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
996	19.096	16.911	7	2.21E+01	0.00E+00	2.21E+01	2.21E+01	0.00E+00	9.72E-02	2.22E+01	5
Case 2: Protected 12 rounds at aimpoint (17.70, 14.75)											
776	17.999	14.606	4	1.73E+01	0.00E+00	1.73E+01	1.30E+02	0.00E+00	5.72E-01	1.79E+01	5
846	17.548	14.720	33	4.22E+00	0.00E+00	4.22E+00	7.27E+00	0.00E+00	3.20E-02	4.25E+00	3

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

847	17.452	14.713	7	4.08E+00	0.00E+00	4.08E+00	6.87E+00	0.00E+00	3.02E-02	4.11E+00	3
848	17.619	14.598	28	4.84E+01	0.00E+00	4.84E+01	1.48E+02	0.00E+00	6.51E-01	4.91E+01	6
849	17.847	14.523	14	4.28E+01	0.00E+00	4.28E+01	1.46E+02	0.00E+00	6.42E-01	4.34E+01	6
850	17.645	14.519	5	3.68E+01	0.00E+00	3.68E+01	1.46E+02	0.00E+00	6.42E-01	3.74E+01	6
851	17.522	14.526	16	2.20E+01	0.00E+00	2.20E+01	1.45E+02	0.00E+00	6.38E-01	2.26E+01	5
864	17.794	14.710	24	9.32E+01	0.00E+00	9.32E+01	1.55E+02	0.00E+00	6.82E-01	9.39E+01	8
868	17.645	14.717	10	1.03E+01	0.00E+00	1.03E+01	1.76E+01	0.00E+00	7.74E-02	1.04E+01	4
883	17.944	14.715	6	1.30E+01	0.00E+00	1.30E+01	2.17E+01	0.00E+00	9.55E-02	1.31E+01	4
885	17.712	14.726	1	7.49E+01	0.00E+00	7.49E+01	1.30E+02	0.00E+00	5.72E-01	7.55E+01	8

Sarin (GB) 250kg Bomb
Heavy Attack

Height of Release: 0m

			Inhalation				Percutaneous				Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected			24 rounds at aimpoint (17.65, 19.55)									
282	17.696	17.960	2	8.42E+01	0.00E+00	8.42E+01	8.42E+01	0.00E+00	3.70E-01	8.46E+01	8	
284	17.741	17.997	2	8.60E+01	0.00E+00	8.60E+01	8.60E+01	0.00E+00	3.78E-01	8.64E+01	8	
285	17.693	18.039	2	8.81E+01	0.00E+00	8.81E+01	8.81E+01	0.00E+00	3.88E-01	8.85E+01	8	
403	17.533	17.964	7	7.03E+01	0.00E+00	7.03E+01	7.03E+01	0.00E+00	3.09E-01	7.06E+01	7	
426	17.792	17.981	3	8.52E+01	0.00E+00	8.52E+01	8.52E+01	0.00E+00	3.75E-01	8.56E+01	8	
479	17.571	18.054	4	8.29E+01	0.00E+00	8.29E+01	8.29E+01	0.00E+00	3.65E-01	8.33E+01	8	
524	18.297	18.033	2	1.39E-02	0.00E+00	1.39E-02	1.39E-02	0.00E+00	6.12E-05	1.40E-02	1	
525	18.296	17.953	2	2.98E-02	0.00E+00	2.98E-02	2.98E-02	0.00E+00	1.31E-04	2.99E-02	1	
658	18.138	17.962	7	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4	
734	18.172	18.053	4	5.97E+00	0.00E+00	5.97E+00	5.97E+00	0.00E+00	2.63E-02	6.00E+00	3	
761	17.998	18.471	4	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8	
767	17.905	18.470	4	1.31E+02	0.00E+00	1.31E+02	1.31E+02	0.00E+00	5.76E-01	1.32E+02	8	
768	18.003	14.798	7	5.01E+00	0.00E+00	5.01E+00	5.01E+00	0.00E+00	2.20E-02	5.03E+00	3	
774	17.506	14.808	6	5.53E+00	0.00E+00	5.53E+00	5.53E+00	0.00E+00	2.43E-02	5.55E+00	3	
776	17.999	14.606	4	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3	
823	17.948	18.476	2	1.26E+02	0.00E+00	1.26E+02	1.26E+02	0.00E+00	5.54E-01	1.27E+02	8	
846	17.548	14.720	33	5.57E+00	0.00E+00	5.57E+00	5.57E+00	0.00E+00	2.45E-02	5.59E+00	3	
847	17.452	14.713	7	3.48E+00	0.00E+00	3.48E+00	3.48E+00	0.00E+00	1.53E-02	3.50E+00	3	
848	17.619	14.598	28	4.75E+00	0.00E+00	4.75E+00	4.75E+00	0.00E+00	2.09E-02	4.77E+00	3	
849	17.847	14.523	14	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.64E-02	3.75E+00	3	
850	17.645	14.519	5	3.64E+00	0.00E+00	3.64E+00	3.64E+00	0.00E+00	1.60E-02	3.66E+00	3	
851	17.522	14.526	16	3.02E+00	0.00E+00	3.02E+00	3.02E+00	0.00E+00	1.33E-02	3.03E+00	3	
852	17.775	18.473	40	1.32E+02	0.00E+00	1.32E+02	1.32E+02	0.00E+00	5.81E-01	1.33E+02	8	
854	17.942	18.391	2	1.13E+02	0.00E+00	1.13E+02	1.13E+02	0.00E+00	4.97E-01	1.13E+02	8	
855	17.799	18.399	5	1.21E+02	0.00E+00	1.21E+02	1.21E+02	0.00E+00	5.32E-01	1.22E+02	8	
856	17.75	14.796	9	7.70E+00	0.00E+00	7.70E+00	7.70E+00	0.00E+00	3.39E-02	7.73E+00	4	
864	17.794	14.710	24	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.84E-02	6.49E+00	4	
868	17.645	14.717	10	6.53E+00	0.00E+00	6.53E+00	6.53E+00	0.00E+00	2.87E-02	6.56E+00	4	
872	17.453	14.800	1	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3	
883	17.944	14.715	6	5.43E+00	0.00E+00	5.43E+00	5.43E+00	0.00E+00	2.39E-02	5.45E+00	3	
885	17.712	14.726	1	6.71E+00	0.00E+00	6.71E+00	6.71E+00	0.00E+00	2.95E-02	6.74E+00	4	
886	17.63	18.485	1	1.34E+02	0.00E+00	1.34E+02	1.34E+02	0.00E+00	5.90E-01	1.35E+02	8	
911	17.49	16.998	2	2.91E+01	0.00E+00	2.91E+01	2.91E+01	0.00E+00	1.28E-01	2.92E+01	5	
913	17.539	17.001	2	3.49E+01	0.00E+00	3.49E+01	3.49E+01	0.00E+00	1.54E-01	3.51E+01	6	
914	18.004	17.005	3	2.87E+01	0.00E+00	2.87E+01	2.87E+01	0.00E+00	1.26E-01	2.88E+01	5	
915	17.953	16.928	3	3.31E+01	0.00E+00	3.31E+01	3.31E+01	0.00E+00	1.46E-01	3.32E+01	6	
916	18.006	16.927	3	2.71E+01	0.00E+00	2.71E+01	2.71E+01	0.00E+00	1.19E-01	2.72E+01	5	
917	18.056	16.923	3	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.20E-02	2.10E+01	5	
918	18.099	16.922	4	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5	
919	17.894	16.929	2	3.85E+01	0.00E+00	3.85E+01	3.85E+01	0.00E+00	1.69E-01	3.87E+01	6	
934	17.893	16.999	2	4.03E+01	0.00E+00	4.03E+01	4.03E+01	0.00E+00	1.77E-01	4.05E+01	6	
935	18.196	17.004	3	6.33E+00	0.00E+00	6.33E+00	6.33E+00	0.00E+00	2.79E-02	6.36E+00	4	
936	17.843	17.001	2	4.36E+01	0.00E+00	4.36E+01	4.36E+01	0.00E+00	1.92E-01	4.38E+01	6	
952	18.15	17.000	3	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4	
953	18.055	17.000	3	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.64E-02	2.20E+01	5	
954	18.098	16.998	3	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5	
956	17.792	17.000	2	4.57E+01	0.00E+00	4.57E+01	4.57E+01	0.00E+00	2.01E-01	4.59E+01	6	
957	17.746	16.997	2	4.65E+01	0.00E+00	4.65E+01	4.65E+01	0.00E+00	2.05E-01	4.67E+01	6	
958	17.696	16.997	2	4.56E+01	0.00E+00	4.56E+01	4.56E+01	0.00E+00	2.01E-01	4.58E+01	6	
963	18.299	16.903	1	8.96E-01	0.00E+00	8.96E-01	8.96E-01	0.00E+00	3.94E-03	9.00E-01	2	
964	18.25	16.903	1	2.81E+00	0.00E+00	2.81E+00	2.81E+00	0.00E+00	1.24E-02	2.82E+00	2	
965	18.196	16.903	1	6.22E+00	0.00E+00	6.22E+00	6.22E+00	0.00E+00	2.74E-02	6.25E+00	4	
966	18.145	16.907	1	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4	
967	17.841	16.917	1	4.17E+01	0.00E+00	4.17E+01	4.17E+01	0.00E+00	1.83E-01	4.19E+01	6	

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

986	17.597	17.004	1	4.05E+01	0.00E+00	4.05E+01	4.05E+01	0.00E+00	1.78E-01	4.07E+01	6
988	17.649	17.006	2	4.39E+01	0.00E+00	4.39E+01	4.39E+01	0.00E+00	1.93E-01	4.41E+01	6
997	17.947	17.000	2	3.52E+01	0.00E+00	3.52E+01	3.52E+01	0.00E+00	1.55E-01	3.54E+01	6
Case 2: Protected 24 rounds at aimpoint (17.65, 18.45)											
282	17.696	17.960	2	8.01E+00	0.00E+00	8.01E+00	3.01E+02	0.00E+00	1.32E+00	9.33E+00	4
284	17.741	17.997	2	7.71E+00	0.00E+00	7.71E+00	2.67E+02	0.00E+00	1.17E+00	8.88E+00	4
285	17.693	18.039	2	6.87E+01	0.00E+00	6.87E+01	3.18E+02	0.00E+00	1.40E+00	7.01E+01	7
403	17.533	17.964	7	5.06E+00	0.00E+00	5.06E+00	2.73E+02	0.00E+00	1.20E+00	6.26E+00	4
426	17.792	17.981	3	2.05E+01	0.00E+00	2.05E+01	3.00E+02	0.00E+00	1.32E+00	2.18E+01	5
479	17.571	18.054	4	4.12E+01	0.00E+00	4.12E+01	2.91E+02	0.00E+00	1.28E+00	4.25E+01	6
761	17.998	18.471	4	2.40E+00	0.00E+00	2.40E+00	3.42E+00	0.00E+00	1.50E-02	2.42E+00	2
767	17.905	18.470	4	5.93E+00	0.00E+00	5.93E+00	8.45E+00	0.00E+00	3.72E-02	5.97E+00	3
823	17.948	18.476	2	4.43E+01	0.00E+00	4.43E+01	6.31E+01	0.00E+00	2.78E-01	4.46E+01	6
852	17.775	18.473	40	2.36E+01	0.00E+00	2.36E+01	3.47E+01	0.00E+00	1.53E-01	2.38E+01	5
854	17.942	18.391	2	9.29E+01	0.00E+00	9.29E+01	1.43E+02	0.00E+00	6.29E-01	9.35E+01	8
855	17.799	18.399	5	4.37E+00	0.00E+00	4.37E+00	6.50E+00	0.00E+00	2.86E-02	4.40E+00	3
886	17.63	18.485	1	1.49E+01	0.00E+00	1.49E+01	2.23E+01	0.00E+00	9.81E-02	1.50E+01	4
911	17.49	16.998	2	0.00E+00	0.00E+00	0.00E+00	4.40E+01	0.00E+00	1.94E-01	1.94E-01	1
913	17.539	17.001	2	0.00E+00	0.00E+00	0.00E+00	5.53E+01	0.00E+00	2.43E-01	2.43E-01	1
914	18.004	17.005	3	0.00E+00	0.00E+00	0.00E+00	4.51E+01	0.00E+00	1.98E-01	1.98E-01	1
915	17.953	16.928	3	0.00E+00	0.00E+00	0.00E+00	4.07E+01	0.00E+00	1.79E-01	1.79E-01	1
916	18.006	16.927	3	0.00E+00	0.00E+00	0.00E+00	3.23E+01	0.00E+00	1.42E-01	1.42E-01	1
917	18.056	16.923	3	0.00E+00	0.00E+00	0.00E+00	2.10E+01	0.00E+00	9.24E-02	9.24E-02	1
918	18.099	16.922	4	0.00E+00	0.00E+00	0.00E+00	1.17E+01	0.00E+00	5.15E-02	5.15E-02	1
919	17.894	16.929	2	0.00E+00	0.00E+00	0.00E+00	4.53E+01	0.00E+00	1.99E-01	1.99E-01	1
934	17.893	16.999	2	0.00E+00	0.00E+00	0.00E+00	6.04E+01	0.00E+00	2.66E-01	2.66E-01	2
935	18.196	17.004	3	0.00E+00	0.00E+00	0.00E+00	1.43E+00	0.00E+00	6.29E-03	6.29E-03	1
936	17.843	17.001	2	0.00E+00	0.00E+00	0.00E+00	6.23E+01	0.00E+00	2.74E-01	2.74E-01	2
952	18.15	17.000	3	0.00E+00	0.00E+00	0.00E+00	5.28E+00	0.00E+00	2.32E-02	2.32E-02	1
953	18.055	17.000	3	0.00E+00	0.00E+00	0.00E+00	2.89E+01	0.00E+00	1.27E-01	1.27E-01	1
954	18.098	16.998	3	0.00E+00	0.00E+00	0.00E+00	1.56E+01	0.00E+00	6.86E-02	6.86E-02	1
956	17.792	17.000	2	0.00E+00	0.00E+00	0.00E+00	6.22E+01	0.00E+00	2.74E-01	2.74E-01	2
957	17.746	16.997	2	0.00E+00	0.00E+00	0.00E+00	6.17E+01	0.00E+00	2.71E-01	2.71E-01	2
958	17.696	16.997	2	0.00E+00	0.00E+00	0.00E+00	6.18E+01	0.00E+00	2.72E-01	2.72E-01	2
963	18.299	16.903	1	0.00E+00	0.00E+00	0.00E+00	4.31E-05	0.00E+00	1.90E-07	1.90E-07	1
964	18.25	16.903	1	0.00E+00	0.00E+00	0.00E+00	2.15E-03	0.00E+00	9.46E-06	9.46E-06	1
965	18.196	16.903	1	0.00E+00	0.00E+00	0.00E+00	1.21E+00	0.00E+00	5.32E-03	5.32E-03	1
966	18.145	16.907	1	0.00E+00	0.00E+00	0.00E+00	4.67E+00	0.00E+00	2.05E-02	2.05E-02	1
967	17.841	16.917	1	0.00E+00	0.00E+00	0.00E+00	4.37E+01	0.00E+00	1.92E-01	1.92E-01	1
986	17.597	17.004	1	0.00E+00	0.00E+00	0.00E+00	6.20E+01	0.00E+00	2.73E-01	2.73E-01	2
988	17.649	17.006	2	0.00E+00	0.00E+00	0.00E+00	6.38E+01	0.00E+00	2.81E-01	2.81E-01	2
997	17.947	17.000	2	0.00E+00	0.00E+00	0.00E+00	5.60E+01	0.00E+00	2.46E-01	2.46E-01	1

Sarin (GB) 250kg TBM
Light Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected				1 rounds at aimpoint (17.60, 17.00)							
774	17.506	14.808	6	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.41E-02	7.77E+00	4
846	17.548	14.720	33	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
847	17.452	14.713	7	3.17E+00	0.00E+00	3.17E+00	3.17E+00	0.00E+00	1.39E-02	3.18E+00	3
848	17.619	14.598	28	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
849	17.847	14.523	14	6.06E+00	0.00E+00	6.06E+00	6.06E+00	0.00E+00	2.67E-02	6.09E+00	4
850	17.645	14.519	5	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
851	17.522	14.526	16	7.65E+00	0.00E+00	7.65E+00	7.65E+00	0.00E+00	3.37E-02	7.68E+00	4
856	17.75	14.796	9	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
864	17.794	14.710	24	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
868	17.645	14.717	10	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
872	17.453	14.800	1	3.83E+00	0.00E+00	3.83E+00	3.83E+00	0.00E+00	1.69E-02	3.85E+00	3
885	17.712	14.726	1	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
958	17.696	16.997	2	4.96E+03	0.00E+00	4.96E+03	4.96E+03	0.00E+00	2.18E+01	4.98E+03	8
988	17.649	17.006	2	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
Case 2: Protected				1 round at aimpoint (17.70, 18.65)							
282	17.696	17.960	2	0.00E+00	0.00E+00	0.00E+00	5.44E+01	0.00E+00	2.39E-01	2.39E-01	1
284	17.741	17.997	2	0.00E+00	0.00E+00	0.00E+00	2.97E+02	0.00E+00	1.31E+00	1.31E+00	2
285	17.693	18.039	2	0.00E+00	0.00E+00	0.00E+00	3.82E+01	0.00E+00	1.68E-01	1.68E-01	1
426	17.792	17.981	3	0.00E+00	0.00E+00	0.00E+00	3.22E+02	0.00E+00	1.42E+00	1.42E+00	2
852	17.775	18.473	40	5.57E+00	0.00E+00	5.57E+00	5.64E+03	0.00E+00	2.48E+01	3.04E+01	6
855	17.799	18.399	5	0.00E+00	0.00E+00	0.00E+00	3.34E+02	0.00E+00	1.47E+00	1.47E+00	2

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected				2 rounds at aimpoint (17.75, 19.95)							
282	17.696	17.960	2	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5
284	17.741	17.997	2	1.89E+01	0.00E+00	1.89E+01	1.89E+01	0.00E+00	8.32E-02	1.90E+01	5
285	17.693	18.039	2	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
403	17.533	17.964	7	2.03E+01	0.00E+00	2.03E+01	2.03E+01	0.00E+00	8.93E-02	2.04E+01	5
426	17.792	17.981	3	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
479	17.571	18.054	4	2.67E+01	0.00E+00	2.67E+01	2.67E+01	0.00E+00	1.17E-01	2.68E+01	5
524	18.297	18.033	2	5.36E+01	0.00E+00	5.36E+01	5.36E+01	0.00E+00	2.36E-01	5.38E+01	7
525	18.296	17.953	2	4.56E+01	0.00E+00	4.56E+01	4.56E+01	0.00E+00	2.01E-01	4.58E+01	6
526	18.347	17.998	2	3.54E+01	0.00E+00	3.54E+01	3.54E+01	0.00E+00	1.56E-01	3.56E+01	6
658	18.138	17.962	7	2.95E+01	0.00E+00	2.95E+01	2.95E+01	0.00E+00	1.30E-01	2.96E+01	5
675	18.397	17.990	3	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
734	18.172	18.053	4	4.67E+01	0.00E+00	4.67E+01	4.67E+01	0.00E+00	2.05E-01	4.69E+01	6
761	17.998	18.471	4	1.31E+00	0.00E+00	1.31E+00	1.31E+00	0.00E+00	5.76E-03	1.32E+00	2
767	17.905	18.470	4	2.08E+00	0.00E+00	2.08E+00	2.08E+00	0.00E+00	9.15E-03	2.09E+00	2
768	18.003	14.798	7	3.57E+00	0.00E+00	3.57E+00	3.57E+00	0.00E+00	1.57E-02	3.59E+00	3
774	17.506	14.808	6	4.42E+00	0.00E+00	4.42E+00	4.42E+00	0.00E+00	1.94E-02	4.44E+00	3
776	17.999	14.606	4	3.27E+00	0.00E+00	3.27E+00	3.27E+00	0.00E+00	1.44E-02	3.28E+00	3
782	18.636	15.483	5	5.65E-01	0.00E+00	5.65E-01	5.65E-01	0.00E+00	2.49E-03	5.67E-01	2
784	18.591	15.481	2	2.26E+00	0.00E+00	2.26E+00	2.26E+00	0.00E+00	9.94E-03	2.27E+00	2
786	18.543	15.483	4	3.52E+00	0.00E+00	3.52E+00	3.52E+00	0.00E+00	1.55E-02	3.54E+00	3
793	18.439	15.487	3	5.76E+00	0.00E+00	5.76E+00	5.76E+00	0.00E+00	2.53E-02	5.79E+00	3
794	18.489	15.483	3	4.70E+00	0.00E+00	4.70E+00	4.70E+00	0.00E+00	2.07E-02	4.72E+00	3
799	18.4	15.488	4	6.55E+00	0.00E+00	6.55E+00	6.55E+00	0.00E+00	2.88E-02	6.58E+00	4
805	18.49	15.405	3	4.58E+00	0.00E+00	4.58E+00	4.58E+00	0.00E+00	2.02E-02	4.60E+00	3
815	18.545	15.420	4	3.34E+00	0.00E+00	3.34E+00	3.34E+00	0.00E+00	1.47E-02	3.35E+00	3
823	17.948	18.476	2	1.97E-01	0.00E+00	1.97E-01	1.97E-01	0.00E+00	8.67E-04	1.98E-01	1
846	17.548	14.720	33	4.87E+00	0.00E+00	4.87E+00	4.87E+00	0.00E+00	2.14E-02	4.89E+00	3
847	17.452	14.713	7	3.80E+00	0.00E+00	3.80E+00	3.80E+00	0.00E+00	1.67E-02	3.82E+00	3
848	17.619	14.598	28	4.66E+00	0.00E+00	4.66E+00	4.66E+00	0.00E+00	2.05E-02	4.68E+00	3
849	17.847	14.523	14	3.05E+00	0.00E+00	3.05E+00	3.05E+00	0.00E+00	1.34E-02	3.06E+00	3
850	17.645	14.519	5	4.43E+00	0.00E+00	4.43E+00	4.43E+00	0.00E+00	1.95E-02	4.45E+00	3
851	17.522	14.526	16	4.23E+00	0.00E+00	4.23E+00	4.23E+00	0.00E+00	1.86E-02	4.25E+00	3
852	17.775	18.473	40	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
854	17.942	18.391	2	6.51E-01	0.00E+00	6.51E-01	6.51E-01	0.00E+00	2.86E-03	6.54E-01	2
855	17.799	18.399	5	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	6.03E-02	1.38E+01	4
856	17.75	14.796	9	4.55E+00	0.00E+00	4.55E+00	4.55E+00	0.00E+00	2.00E-02	4.57E+00	3
864	17.794	14.710	24	3.87E+00	0.00E+00	3.87E+00	3.87E+00	0.00E+00	1.70E-02	3.89E+00	3
868	17.645	14.717	10	5.01E+00	0.00E+00	5.01E+00	5.01E+00	0.00E+00	2.20E-02	5.03E+00	3
872	17.453	14.800	1	4.03E+00	0.00E+00	4.03E+00	4.03E+00	0.00E+00	1.77E-02	4.05E+00	3
883	17.944	14.715	6	3.55E+00	0.00E+00	3.55E+00	3.55E+00	0.00E+00	1.56E-02	3.57E+00	3
885	17.712	14.726	1	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.12E-02	4.83E+00	3
886	17.63	18.485	1	6.09E+01	0.00E+00	6.09E+01	6.09E+01	0.00E+00	2.68E-01	6.12E+01	7
887	18.486	15.329	3	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.01E-02	4.58E+00	3
890	18.44	15.406	2	5.59E+00	0.00E+00	5.59E+00	5.59E+00	0.00E+00	2.46E-02	5.61E+00	3
911	17.49	16.998	2	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
913	17.539	17.001	2	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
914	18.004	17.005	3	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.63E-02	8.30E+00	4
915	17.953	16.928	3	7.42E+00	0.00E+00	7.42E+00	7.42E+00	0.00E+00	3.26E-02	7.45E+00	4
916	18.006	16.927	3	8.31E+00	0.00E+00	8.31E+00	8.31E+00	0.00E+00	3.66E-02	8.35E+00	4
917	18.056	16.923	3	9.18E+00	0.00E+00	9.18E+00	9.18E+00	0.00E+00	4.04E-02	9.22E+00	4
918	18.099	16.922	4	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
919	17.894	16.929	2	7.36E+00	0.00E+00	7.36E+00	7.36E+00	0.00E+00	3.24E-02	7.39E+00	4
927	18.594	15.407	4	2.13E+00	0.00E+00	2.13E+00	2.13E+00	0.00E+00	9.37E-03	2.14E+00	2
933	18.637	15.415	4	5.18E-01	0.00E+00	5.18E-01	5.18E-01	0.00E+00	2.28E-03	5.20E-01	2
934	17.893	16.999	2	7.27E+00	0.00E+00	7.27E+00	7.27E+00	0.00E+00	3.20E-02	7.30E+00	4
935	18.196	17.004	3	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
936	17.843	17.001	2	7.56E+00	0.00E+00	7.56E+00	7.56E+00	0.00E+00	3.33E-02	7.59E+00	4
950	18.521	16.997	12	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
952	18.15	17.000	3	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
953	18.055	17.000	3	9.39E+00	0.00E+00	9.39E+00	9.39E+00	0.00E+00	4.13E-02	9.43E+00	4
954	18.098	16.998	3	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
955	18.498	16.900	4	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.83E-02	6.47E+00	4
956	17.792	17.000	2	9.52E+00	0.00E+00	9.52E+00	9.52E+00	0.00E+00	4.19E-02	9.56E+00	4

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

957	17.746	16.997	2	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
958	17.696	16.997	2	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
959	18.643	16.902	9	3.11E-01	0.00E+00	3.11E-01	3.11E-01	0.00E+00	1.37E-03	3.12E-01	2
960	18.452	16.901	4	8.57E+00	0.00E+00	8.57E+00	8.57E+00	0.00E+00	3.77E-02	8.61E+00	4
961	18.4	16.901	1	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
962	18.35	16.901	1	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
963	18.299	16.903	1	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
964	18.25	16.903	1	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
965	18.196	16.903	1	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
966	18.145	16.907	1	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
967	17.841	16.917	1	7.53E+00	0.00E+00	7.53E+00	7.53E+00	0.00E+00	3.31E-02	7.56E+00	4
984	18.538	16.909	2	4.65E+00	0.00E+00	4.65E+00	4.65E+00	0.00E+00	2.05E-02	4.67E+00	3
985	18.587	16.905	2	2.71E+00	0.00E+00	2.71E+00	2.71E+00	0.00E+00	1.19E-02	2.72E+00	2
986	17.597	17.004	1	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.85E-02	1.34E+01	4
988	17.649	17.006	2	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.85E-02	1.34E+01	4
997	17.947	17.000	2	7.30E+00	0.00E+00	7.30E+00	7.30E+00	0.00E+00	3.21E-02	7.33E+00	4
Case 2: Protected 2 rounds at aimpoint (13.75, 15.35)											
766	14.298	15.349	9	7.84E+00	0.00E+00	7.84E+00	8.06E+00	0.00E+00	3.55E-02	7.88E+00	4

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

Height of Release, m												
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)		
Case 1: Unprotected 4 rounds at aimpoint (17.75, 20.00)												
282	17.696	17.960	2	2.49E+01	0.00E+00	2.49E+01	2.49E+01	0.00E+00	1.10E-01	2.50E+01	5	
284	17.741	17.997	2	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5	
285	17.693	18.039	2	2.84E+01	0.00E+00	2.84E+01	2.84E+01	0.00E+00	1.25E-01	2.85E+01	5	
403	17.533	17.964	7	2.21E+01	0.00E+00	2.21E+01	2.21E+01	0.00E+00	9.72E-02	2.22E+01	5	
426	17.792	17.981	3	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5	
479	17.571	18.054	4	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.32E-01	3.00E+01	6	
524	18.297	18.033	2	7.75E+01	0.00E+00	7.75E+01	7.75E+01	0.00E+00	3.41E-01	7.78E+01	8	
525	18.296	17.953	2	7.42E+01	0.00E+00	7.42E+01	7.42E+01	0.00E+00	3.26E-01	7.45E+01	7	
526	18.347	17.998	2	4.89E+01	0.00E+00	4.89E+01	4.89E+01	0.00E+00	2.15E-01	4.91E+01	6	
658	18.138	17.962	7	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8	
675	18.397	17.990	3	2.71E+01	0.00E+00	2.71E+01	2.71E+01	0.00E+00	1.19E-01	2.72E+01	5	
734	18.172	18.053	4	1.21E+02	0.00E+00	1.21E+02	1.21E+02	0.00E+00	5.32E-01	1.22E+02	8	
761	17.998	18.471	4	1.65E+02	0.00E+00	1.65E+02	1.65E+02	0.00E+00	7.26E-01	1.66E+02	8	
767	17.905	18.470	4	4.35E+01	0.00E+00	4.35E+01	4.35E+01	0.00E+00	1.91E-01	4.37E+01	6	
768	18.003	14.798	7	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.69E-02	1.53E+01	5	
774	17.506	14.808	6	4.28E+00	0.00E+00	4.28E+00	4.28E+00	0.00E+00	1.88E-02	4.30E+00	3	
776	17.999	14.606	4	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4	
778	18.793	15.558	1	6.23E-02	0.00E+00	6.23E-02	6.23E-02	0.00E+00	2.74E-04	6.26E-02	1	
782	18.636	15.483	5	2.98E+00	0.00E+00	2.98E+00	2.98E+00	0.00E+00	1.31E-02	2.99E+00	2	
783	18.794	15.483	6	5.36E-02	0.00E+00	5.36E-02	5.36E-02	0.00E+00	2.36E-04	5.38E-02	1	
784	18.591	15.481	2	4.13E+00	0.00E+00	4.13E+00	4.13E+00	0.00E+00	1.82E-02	4.15E+00	3	
785	18.685	15.488	5	1.67E+00	0.00E+00	1.67E+00	1.67E+00	0.00E+00	7.35E-03	1.68E+00	2	
786	18.543	15.483	4	5.69E+00	0.00E+00	5.69E+00	5.69E+00	0.00E+00	2.50E-02	5.72E+00	3	
793	18.439	15.487	3	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4	
794	18.489	15.483	3	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.57E-02	8.16E+00	4	
795	18.739	15.483	5	6.23E-01	0.00E+00	6.23E-01	6.23E-01	0.00E+00	2.74E-03	6.26E-01	2	
799	18.4	15.488	4	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4	
805	18.49	15.405	3	8.05E+00	0.00E+00	8.05E+00	8.05E+00	0.00E+00	3.54E-02	8.09E+00	4	
815	18.545	15.420	4	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.44E-02	5.56E+00	3	
816	18.738	15.415	5	6.40E-01	0.00E+00	6.40E-01	6.40E-01	0.00E+00	2.82E-03	6.43E-01	2	
823	17.948	18.476	2	9.50E+01	0.00E+00	9.50E+01	9.50E+01	0.00E+00	4.18E-01	9.54E+01	8	
846	17.548	14.720	33	5.08E+00	0.00E+00	5.08E+00	5.08E+00	0.00E+00	2.24E-02	5.10E+00	3	
847	17.452	14.713	7	3.65E+00	0.00E+00	3.65E+00	3.65E+00	0.00E+00	1.61E-02	3.67E+00	3	
848	17.619	14.598	28	5.91E+00	0.00E+00	5.91E+00	5.91E+00	0.00E+00	2.60E-02	5.94E+00	3	
849	17.847	14.523	14	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4	
850	17.645	14.519	5	6.07E+00	0.00E+00	6.07E+00	6.07E+00	0.00E+00	2.67E-02	6.10E+00	4	
851	17.522	14.526	16	4.15E+00	0.00E+00	4.15E+00	4.15E+00	0.00E+00	1.83E-02	4.17E+00	3	
852	17.775	18.473	40	2.30E+01	0.00E+00	2.30E+01	2.30E+01	0.00E+00	1.01E-01	2.31E+01	5	
854	17.942	18.391	2	8.25E+01	0.00E+00	8.25E+01	8.25E+01	0.00E+00	3.63E-01	8.29E+01	8	
855	17.799	18.399	5	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5	
856	17.75	14.796	9	9.60E+00	0.00E+00	9.60E+00	9.60E+00	0.00E+00	4.22E-02	9.64E+00	4	
864	17.794	14.710	24	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4	
865	18.79	15.396	2	8.96E-02	0.00E+00	8.96E-02	8.96E-02	0.00E+00	3.94E-04	9.00E-02	1	
868	17.645	14.717	10	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.83E-02	6.47E+00	4	
870	18.683	15.404	4	1.74E+00	0.00E+00	1.74E+00	1.74E+00	0.00E+00	7.66E-03	1.75E+00	2	

Table B3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

872	17.453	14.800	1	3.74E+00	0.00E+00	3.74E+00	3.74E+00	0.00E+00	1.65E-02	3.76E+00	3
883	17.944	14.715	6	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
885	17.712	14.726	1	8.34E+00	0.00E+00	8.34E+00	8.34E+00	0.00E+00	3.67E-02	8.38E+00	4
886	17.63	18.485	1	5.76E+01	0.00E+00	5.76E+01	5.76E+01	0.00E+00	2.53E-01	5.79E+01	7
887	18.486	15.329	3	8.10E+00	0.00E+00	8.10E+00	8.10E+00	0.00E+00	3.56E-02	8.14E+00	4
890	18.44	15.406	2	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
911	17.49	16.998	2	8.39E+00	0.00E+00	8.39E+00	8.39E+00	0.00E+00	3.69E-02	8.43E+00	4
912	18.695	16.902	2	5.43E-01	0.00E+00	5.43E-01	5.43E-01	0.00E+00	2.39E-03	5.45E-01	2
913	17.539	17.001	2	9.55E+00	0.00E+00	9.55E+00	9.55E+00	0.00E+00	4.20E-02	9.59E+00	4
914	18.004	17.005	3	3.57E+01	0.00E+00	3.57E+01	3.57E+01	0.00E+00	1.57E-01	3.59E+01	6
915	17.953	16.928	3	2.92E+01	0.00E+00	2.92E+01	2.92E+01	0.00E+00	1.28E-01	2.93E+01	5
916	18.006	16.927	3	3.38E+01	0.00E+00	3.38E+01	3.38E+01	0.00E+00	1.49E-01	3.39E+01	6
917	18.056	16.923	3	3.59E+01	0.00E+00	3.59E+01	3.59E+01	0.00E+00	1.58E-01	3.61E+01	6
918	18.099	16.922	4	3.62E+01	0.00E+00	3.62E+01	3.62E+01	0.00E+00	1.59E-01	3.64E+01	6
919	17.894	16.929	2	2.36E+01	0.00E+00	2.36E+01	2.36E+01	0.00E+00	1.04E-01	2.37E+01	5
927	18.594	15.407	4	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
933	18.637	15.415	4	2.99E+00	0.00E+00	2.99E+00	2.99E+00	0.00E+00	1.32E-02	3.00E+00	3
934	17.893	16.999	2	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.06E-01	2.42E+01	5
935	18.196	17.004	3	3.59E+01	0.00E+00	3.59E+01	3.59E+01	0.00E+00	1.58E-01	3.61E+01	6
936	17.843	17.001	2	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.62E-02	1.97E+01	5
950	18.521	16.997	12	6.84E+00	0.00E+00	6.84E+00	6.84E+00	0.00E+00	3.01E-02	6.87E+00	4
952	18.15	17.000	3	3.70E+01	0.00E+00	3.70E+01	3.70E+01	0.00E+00	1.63E-01	3.72E+01	6
953	18.055	17.000	3	3.80E+01	0.00E+00	3.80E+01	3.80E+01	0.00E+00	1.67E-01	3.82E+01	6
954	18.098	16.998	3	3.83E+01	0.00E+00	3.83E+01	3.83E+01	0.00E+00	1.69E-01	3.85E+01	6
955	18.498	16.900	4	8.19E+00	0.00E+00	8.19E+00	8.19E+00	0.00E+00	3.60E-02	8.23E+00	4
956	17.792	17.000	2	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.08E-02	1.62E+01	5
957	17.746	16.997	2	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
958	17.696	16.997	2	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
959	18.643	16.902	9	1.56E+00	0.00E+00	1.56E+00	1.56E+00	0.00E+00	6.86E-03	1.57E+00	2
960	18.452	16.901	4	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
961	18.4	16.901	1	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5
962	18.35	16.901	1	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.33E-02	2.13E+01	5
963	18.299	16.903	1	2.63E+01	0.00E+00	2.63E+01	2.63E+01	0.00E+00	1.16E-01	2.64E+01	5
964	18.25	16.903	1	3.03E+01	0.00E+00	3.03E+01	3.03E+01	0.00E+00	1.33E-01	3.04E+01	6
965	18.196	16.903	1	3.34E+01	0.00E+00	3.34E+01	3.34E+01	0.00E+00	1.47E-01	3.35E+01	6
966	18.145	16.907	1	3.49E+01	0.00E+00	3.49E+01	3.49E+01	0.00E+00	1.54E-01	3.51E+01	6
967	17.841	16.917	1	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.49E-02	1.94E+01	5
984	18.538	16.909	2	5.92E+00	0.00E+00	5.92E+00	5.92E+00	0.00E+00	2.60E-02	5.95E+00	3
985	18.587	16.905	2	3.64E+00	0.00E+00	3.64E+00	3.64E+00	0.00E+00	1.60E-02	3.66E+00	3
986	17.597	17.004	1	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
988	17.649	17.006	2	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
997	17.947	17.000	2	3.00E+01	0.00E+00	3.00E+01	3.00E+01	0.00E+00	1.32E-01	3.01E+01	6
Case 2: Protected 4 rounds at aimpoint (17.10, 14.90)											
774	17.506	14.808	6	1.64E+03	0.00E+00	1.64E+03	1.67E+03	0.00E+00	7.35E+00	1.65E+03	8
846	17.548	14.720	33	1.72E+01	0.00E+00	1.72E+01	1.15E+02	0.00E+00	5.06E-01	1.77E+01	5
847	17.452	14.713	7	1.16E+01	0.00E+00	1.16E+01	1.18E+02	0.00E+00	5.19E-01	1.21E+01	4
848	17.619	14.598	28	3.74E+00	0.00E+00	3.74E+00	4.57E+03	0.00E+00	2.01E+01	2.38E+01	5
850	17.645	14.519	5	1.17E-01	0.00E+00	1.17E-01	4.50E+02	0.00E+00	1.98E+00	2.10E+00	2
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	1.41E+03	0.00E+00	6.20E+00	6.20E+00	4
868	17.645	14.717	10	1.39E+03	0.00E+00	1.39E+03	1.41E+03	0.00E+00	6.20E+00	1.40E+03	8
872	17.453	14.800	1	1.22E+02	0.00E+00	1.22E+02	1.24E+02	0.00E+00	5.46E-01	1.23E+02	8

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

VX 152mm Artillery
Light Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (17.60, 15.80)							
774	17.506	14.808	6	2.21E-01	2.46E+00	3.09E-01	2.21E-01	2.46E+00	1.75E+01	1.78E+01	5
846	17.548	14.720	33	3.51E-01	3.65E+00	4.91E-01	3.51E-01	3.65E+00	2.60E+01	2.65E+01	5
847	17.452	14.713	7	3.45E-02	3.93E-01	4.83E-02	3.45E-02	3.93E-01	2.80E+00	2.85E+00	2
848	17.619	14.598	28	4.09E-01	3.84E+00	5.73E-01	4.09E-01	3.84E+00	2.75E+01	2.80E+01	5
849	17.847	14.523	14	1.53E-07	0.00E+00	2.14E-07	1.53E-07	0.00E+00	2.14E-07	4.28E-07	1
850	17.645	14.519	5	3.22E-01	2.69E+00	4.51E-01	3.22E-01	2.69E+00	1.93E+01	1.97E+01	5
851	17.522	14.526	16	1.41E-01	1.22E+00	1.97E-01	1.41E-01	1.22E+00	8.74E+00	8.93E+00	4
856	17.750	14.796	9	1.81E-01	2.00E+00	2.53E-01	1.81E-01	2.00E+00	1.43E+01	1.45E+01	4
864	17.794	14.710	24	3.57E-02	4.55E-01	5.00E-02	3.57E-02	4.55E-01	3.23E+00	3.28E+00	3
868	17.645	14.717	10	5.53E-01	5.62E+00	7.74E-01	5.53E-01	5.62E+00	4.01E+01	4.09E+01	6
872	17.453	14.800	1	4.29E-02	5.33E-01	6.01E-02	4.29E-02	5.33E-01	3.79E+00	3.85E+00	3
885	17.712	14.726	1	3.10E-01	3.20E+00	4.34E-01	3.10E-01	3.20E+00	2.28E+01	2.33E+01	5
Case 2: Protected				18 rounds at aimpoint (17.60, 15.80)							
774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	2.14E-04	2.29E+00	1.60E+01	1.60E+01	5
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	4.31E-04	3.40E+00	2.38E+01	2.38E+01	5
847	17.452	14.713	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-01	2.56E+00	2.56E+00	2
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	5.31E-04	3.57E+00	2.50E+01	2.50E+01	5
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	4.05E-04	2.50E+00	1.75E+01	1.75E+01	5
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E+00	7.91E+00	7.91E+00	4
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	2.41E-07	1.86E+00	1.30E+01	1.30E+01	4
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-01	2.96E+00	2.96E+00	2
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	9.23E-04	5.23E+00	3.66E+01	3.66E+01	6
872	17.453	14.800	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-01	3.47E+00	3.47E+00	3
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	4.33E-04	2.97E+00	2.08E+01	2.08E+01	5

VX MRLS
Moderate Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (17.70, 16.20)							
768	18.003	14.798	7	9.69E-01	1.35E+00	1.36E+00	9.69E-01	1.35E+00	1.08E+01	1.22E+01	4
774	17.506	14.808	6	1.60E+00	2.53E+00	2.24E+00	1.60E+00	2.53E+00	2.00E+01	2.22E+01	5
776	17.999	14.606	4	7.85E-01	5.05E-01	1.10E+00	7.85E-01	5.05E-01	4.63E+00	5.73E+00	3
846	17.548	14.720	33	1.64E+00	1.95E+00	2.30E+00	1.64E+00	1.95E+00	1.59E+01	1.82E+01	5
847	17.452	14.713	7	1.02E+00	1.21E+00	1.43E+00	1.02E+00	1.21E+00	9.90E+00	1.13E+01	4
848	17.619	14.598	28	1.69E+00	1.40E+00	2.37E+00	1.69E+00	1.40E+00	1.22E+01	1.45E+01	4
849	17.847	14.523	14	1.40E+00	6.86E-01	1.96E+00	1.40E+00	6.86E-01	6.76E+00	8.72E+00	4
850	17.645	14.519	5	1.60E+00	9.47E-01	2.24E+00	1.60E+00	9.47E-01	8.87E+00	1.11E+01	4
851	17.522	14.526	16	1.14E+00	5.04E-01	1.60E+00	1.14E+00	5.04E-01	5.12E+00	6.72E+00	4
856	17.750	14.796	9	2.11E+00	3.47E+00	2.95E+00	2.11E+00	3.47E+00	2.72E+01	3.02E+01	6
864	17.794	14.710	24	1.71E+00	1.88E+00	2.39E+00	1.71E+00	1.88E+00	1.56E+01	1.79E+01	5
868	17.645	14.717	10	2.11E+00	2.83E+00	2.95E+00	2.11E+00	2.83E+00	2.28E+01	2.57E+01	5
872	17.453	14.800	1	1.18E+00	1.87E+00	1.65E+00	1.18E+00	1.87E+00	1.47E+01	1.64E+01	5
883	17.944	14.715	6	1.52E+00	1.78E+00	2.13E+00	1.52E+00	1.78E+00	1.46E+01	1.67E+01	5
885	17.712	14.726	1	2.09E+00	2.91E+00	2.93E+00	2.09E+00	2.91E+00	2.33E+01	2.62E+01	5
Case 2: Protected				240 rounds at aimpoint (17.70, 16.15)							
768	18.003	14.798	7	0.00E+00	0.00E+00	0.00E+00	7.78E-01	1.63E+00	1.25E+01	1.25E+01	4
774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	1.24E+00	2.95E+00	2.24E+01	2.24E+01	5
776	17.999	14.606	4	0.00E+00	0.00E+00	0.00E+00	6.94E-01	5.18E-01	4.60E+00	4.60E+00	3
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	1.35E+00	2.25E+00	1.76E+01	1.76E+01	5
847	17.452	14.713	7	0.00E+00	0.00E+00	0.00E+00	8.39E-01	1.36E+00	1.07E+01	1.07E+01	4
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	1.42E+00	1.55E+00	1.28E+01	1.28E+01	4
849	17.847	14.523	14	0.00E+00	0.00E+00	0.00E+00	1.21E+00	7.23E-01	6.76E+00	6.76E+00	4
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	1.32E+00	1.03E+00	9.06E+00	9.06E+00	4
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	9.89E-01	5.02E-01	4.90E+00	4.90E+00	3
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	1.62E+00	4.12E+00	3.11E+01	3.11E+01	6
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	1.42E+00	2.16E+00	1.71E+01	1.71E+01	5
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	1.70E+00	3.29E+00	2.54E+01	2.54E+01	5
872	17.453	14.800	1	0.00E+00	0.00E+00	0.00E+00	9.21E-01	2.25E+00	1.70E+01	1.70E+01	5

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

883	17.944	14.715	6	0.00E+00	0.00E+00	0.00E+00	1.25E+00	2.04E+00	1.60E+01	1.60E+01	5
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	1.67E+00	3.37E+00	2.59E+01	2.59E+01	5

VX MRLS
Heavy Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected				720 rounds at aimpoint (17.85, 16.85)							
768	18.003	14.798	7	3.16E+00	2.68E+00	4.42E+00	3.16E+00	2.68E+00	2.32E+01	2.76E+01	5
774	17.506	14.808	6	2.52E+00	1.73E+00	3.53E+00	2.52E+00	1.73E+00	1.56E+01	1.92E+01	5
776	17.999	14.606	4	2.66E+00	1.03E+00	3.72E+00	2.66E+00	1.03E+00	1.09E+01	1.47E+01	4
786	18.543	15.483	4	7.38E-04	0.00E+00	1.03E-03	7.38E-04	0.00E+00	1.03E-03	2.07E-03	1
793	18.439	15.487	3	5.00E-01	1.42E+00	7.00E-01	5.00E-01	1.42E+00	1.06E+01	1.13E+01	4
794	18.489	15.483	3	4.27E-02	5.39E-02	5.98E-02	4.27E-02	5.39E-02	4.37E-01	4.97E-01	2
799	18.400	15.488	4	1.66E+00	5.59E+00	2.32E+00	1.66E+00	5.59E+00	4.15E+01	4.38E+01	6
805	18.490	15.405	3	4.77E-02	4.85E-02	6.68E-02	4.77E-02	4.85E-02	4.06E-01	4.73E-01	2
815	18.545	15.420	4	8.95E-04	0.00E+00	1.25E-03	8.95E-04	0.00E+00	1.25E-03	2.51E-03	1
846	17.548	14.720	33	2.67E+00	1.54E+00	3.74E+00	2.67E+00	1.54E+00	1.45E+01	1.83E+01	5
847	17.452	14.713	7	1.97E+00	7.62E-01	2.76E+00	1.97E+00	7.62E-01	8.09E+00	1.09E+01	4
848	17.619	14.598	28	2.66E+00	9.06E-01	3.72E+00	2.66E+00	9.06E-01	1.01E+01	1.38E+01	4
849	17.847	14.523	14	2.80E+00	9.82E-01	3.92E+00	2.80E+00	9.82E-01	1.08E+01	1.47E+01	4
850	17.645	14.519	5	2.53E+00	5.94E-01	3.54E+00	2.53E+00	5.94E-01	7.70E+00	1.12E+01	4
851	17.522	14.526	16	2.10E+00	4.10E-01	2.94E+00	2.10E+00	4.10E-01	5.81E+00	8.75E+00	4
856	17.750	14.796	9	3.07E+00	2.49E+00	4.30E+00	3.07E+00	2.49E+00	2.17E+01	2.60E+01	5
864	17.794	14.710	24	3.11E+00	2.19E+00	4.35E+00	3.11E+00	2.19E+00	1.97E+01	2.40E+01	5
868	17.645	14.717	10	3.04E+00	1.83E+00	4.26E+00	3.04E+00	1.83E+00	1.71E+01	2.13E+01	5
872	17.453	14.800	1	2.13E+00	1.33E+00	2.98E+00	2.13E+00	1.33E+00	1.23E+01	1.53E+01	5
883	17.944	14.715	6	3.23E+00	2.18E+00	4.52E+00	3.23E+00	2.18E+00	1.98E+01	2.43E+01	5
885	17.712	14.726	1	2.95E+00	1.89E+00	4.13E+00	2.95E+00	1.89E+00	1.74E+01	2.15E+01	5
887	18.486	15.329	3	7.29E-02	6.12E-02	1.02E-01	7.29E-02	6.12E-02	5.30E-01	6.33E-01	2
890	18.440	15.406	2	4.44E-01	9.89E-01	6.22E-01	4.44E-01	9.89E-01	7.54E+00	8.17E+00	4
917	18.056	16.923	3	1.60E-02	0.00E+00	2.24E-02	1.60E-02	0.00E+00	2.24E-02	4.48E-02	1
918	18.099	16.922	4	1.96E-02	0.00E+00	2.74E-02	1.96E-02	0.00E+00	2.74E-02	5.49E-02	1
927	18.594	15.407	4	9.96E-06	0.00E+00	1.39E-05	9.96E-06	0.00E+00	1.39E-05	2.79E-05	1
963	18.299	16.903	1	2.27E-04	0.00E+00	3.18E-04	2.27E-04	0.00E+00	3.18E-04	6.36E-04	1
964	18.250	16.903	1	7.22E-03	0.00E+00	1.01E-02	7.22E-03	0.00E+00	1.01E-02	2.02E-02	1
965	18.196	16.903	1	2.05E-04	0.00E+00	2.87E-04	2.05E-04	0.00E+00	2.87E-04	5.74E-04	1
966	18.145	16.907	1	4.43E-03	0.00E+00	6.20E-03	4.43E-03	0.00E+00	6.20E-03	1.24E-02	1
967	17.841	16.917	1	1.39E-01	0.00E+00	1.95E-01	1.39E-01	0.00E+00	1.95E-01	3.89E-01	2

Case 2: Protected				720 rounds at aimpoint (17.90, 16.40)							
768	18.003	14.798	7	0.00E+00	0.00E+00	0.00E+00	9.09E-01	3.03E+00	2.25E+01	2.25E+01	5
774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	7.26E-01	3.38E+00	2.47E+01	2.47E+01	5
776	17.999	14.606	4	0.00E+00	0.00E+00	0.00E+00	5.58E-01	5.36E-01	4.53E+00	4.53E+00	3
786	18.543	15.483	4	0.00E+00	0.00E+00	0.00E+00	2.91E-03	4.32E-02	3.06E-01	3.06E-01	2
793	18.439	15.487	3	4.72E-02	3.23E+00	6.61E-02	1.01E+00	6.05E+01	4.25E+02	4.25E+02	8
794	18.489	15.483	3	1.40E-03	1.21E-02	1.96E-03	1.85E-01	9.42E+00	6.62E+01	6.62E+01	7
799	18.400	15.488	4	1.92E-01	1.45E+01	2.69E-01	1.85E+00	1.20E+02	8.43E+02	8.43E+02	8
805	18.490	15.405	3	2.01E-03	1.24E-03	2.81E-03	1.70E-01	3.36E+00	2.38E+01	2.38E+01	5
815	18.545	15.420	4	0.00E+00	0.00E+00	0.00E+00	2.55E-03	2.54E-02	1.81E-01	1.81E-01	1
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	6.33E-01	1.86E+00	1.39E+01	1.39E+01	4
847	17.452	14.713	7	0.00E+00	0.00E+00	0.00E+00	4.34E-01	1.16E+00	8.73E+00	8.73E+00	4
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	5.12E-01	5.72E-01	4.72E+00	4.72E+00	3
849	17.847	14.523	14	0.00E+00	0.00E+00	0.00E+00	6.98E-01	1.36E+00	1.05E+01	1.05E+01	4
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	4.34E-01	4.18E-01	3.53E+00	3.53E+00	3
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	3.95E-01	4.50E-01	3.70E+00	3.70E+00	3
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	1.01E+00	8.20E+00	5.88E+01	5.88E+01	7
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	8.00E-01	2.62E+00	1.95E+01	1.95E+01	5
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	8.59E-01	2.80E+00	2.08E+01	2.08E+01	5
872	17.453	14.800	1	0.00E+00	0.00E+00	0.00E+00	5.33E-01	1.84E+00	1.36E+01	1.36E+01	4
883	17.944	14.715	6	0.00E+00	0.00E+00	0.00E+00	9.54E-01	3.30E+00	2.44E+01	2.44E+01	5
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	7.64E-01	3.45E+00	2.52E+01	2.52E+01	5
887	18.486	15.329	3	2.47E-03	1.08E-02	3.46E-03	2.10E-01	3.07E+00	2.18E+01	2.18E+01	5
890	18.440	15.406	2	5.54E-02	1.64E+00	7.76E-02	1.00E+00	2.78E+01	1.96E+02	1.96E+02	8

VX 250kg Bomb
Light Attack
Height of Release: 70m

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				2 rounds at aimpoint (17.65, 17.60)							
774	17.506	14.808	6	1.26E-01	1.59E+00	1.76E-01	1.26E-01	1.59E+00	1.13E+01	1.15E+01	4
846	17.548	14.720	33	1.48E-01	1.86E+00	2.07E-01	1.48E-01	1.86E+00	1.32E+01	1.34E+01	4
847	17.452	14.713	7	3.08E-02	4.34E-01	4.31E-02	3.08E-02	4.34E-01	3.08E+00	3.12E+00	3
848	17.619	14.598	28	6.00E-02	7.77E-01	8.40E-02	6.00E-02	7.77E-01	5.52E+00	5.61E+00	3
849	17.847	14.523	14	8.69E-02	1.02E+00	1.22E-01	8.69E-02	1.02E+00	7.26E+00	7.38E+00	4
850	17.645	14.519	5	3.08E-02	4.09E-01	4.31E-02	3.08E-02	4.09E-01	2.91E+00	2.95E+00	2
851	17.522	14.526	16	9.97E-02	1.18E+00	1.40E-01	9.97E-02	1.18E+00	8.40E+00	8.54E+00	4
856	17.750	14.796	9	1.15E-01	1.35E+00	1.61E-01	1.15E-01	1.35E+00	9.61E+00	9.77E+00	4
864	17.794	14.710	24	1.44E-01	1.74E+00	2.02E-01	1.44E-01	1.74E+00	1.24E+01	1.26E+01	4
868	17.645	14.717	10	3.54E-02	4.89E-01	4.96E-02	3.54E-02	4.89E-01	3.47E+00	3.52E+00	3
872	17.453	14.800	1	4.00E-02	4.88E-01	5.60E-02	4.00E-02	4.88E-01	3.47E+00	3.53E+00	3
883	17.944	14.715	6	2.05E-06	2.72E-02	2.87E-06	2.05E-06	2.72E-02	1.90E-01	1.90E-01	1
885	17.712	14.726	1	4.97E-02	5.80E-01	6.96E-02	4.97E-02	5.80E-01	4.13E+00	4.20E+00	3
911	17.490	16.998	2	5.30E-04	1.56E-03	7.42E-04	5.30E-04	1.56E-03	1.17E-02	1.24E-02	1
913	17.539	17.001	2	3.68E+01	1.18E+03	5.15E+01	3.68E+01	1.18E+03	8.31E+03	8.36E+03	8
936	17.843	17.001	2	7.66E-01	2.54E+01	1.07E+00	7.66E-01	2.54E+01	1.79E+02	1.80E+02	8
956	17.792	17.000	2	4.18E+01	1.32E+03	5.85E+01	4.18E+01	1.32E+03	9.30E+03	9.36E+03	8
957	17.746	16.997	2	7.57E-04	3.16E-03	1.06E-03	7.57E-04	3.16E-03	2.32E-02	2.42E-02	1
967	17.841	16.917	1	1.13E+00	3.44E+01	1.58E+00	1.13E+00	3.44E+01	2.42E+02	2.44E+02	8
986	17.597	17.004	1	3.21E-01	1.05E+01	4.49E-01	3.21E-01	1.05E+01	7.39E+01	7.44E+01	7
Case 2: Protected				2 rounds at aimpoint (17.65, 17.60)							
774	17.506	14.808	6	0.00E+00	3.36E-01	0.00E+00	0.00E+00	1.50E+00	1.05E+01	1.05E+01	4
846	17.548	14.720	33	0.00E+00	3.14E-01	0.00E+00	0.00E+00	1.76E+00	1.23E+01	1.23E+01	4
847	17.452	14.713	7	0.00E+00	5.02E-02	0.00E+00	0.00E+00	4.07E-01	2.85E+00	2.85E+00	2
848	17.619	14.598	28	0.00E+00	4.78E-02	0.00E+00	0.00E+00	7.26E-01	5.08E+00	5.08E+00	3
849	17.847	14.523	14	0.00E+00	4.53E-02	0.00E+00	0.00E+00	9.52E-01	6.66E+00	6.66E+00	4
850	17.645	14.519	5	0.00E+00	4.88E-03	0.00E+00	0.00E+00	3.80E-01	2.66E+00	2.66E+00	2
851	17.522	14.526	16	0.00E+00	5.88E-02	0.00E+00	0.00E+00	1.10E+00	7.70E+00	7.70E+00	4
856	17.750	14.796	9	0.00E+00	2.95E-01	0.00E+00	0.00E+00	1.28E+00	8.96E+00	8.96E+00	4
864	17.794	14.710	24	0.00E+00	2.95E-01	0.00E+00	0.00E+00	1.64E+00	1.15E+01	1.15E+01	4
868	17.645	14.717	10	0.00E+00	6.23E-02	0.00E+00	0.00E+00	4.59E-01	3.21E+00	3.21E+00	3
872	17.453	14.800	1	0.00E+00	9.01E-02	0.00E+00	0.00E+00	4.60E-01	3.22E+00	3.22E+00	3
883	17.944	14.715	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-02	1.77E-01	1.77E-01	1
885	17.712	14.726	1	0.00E+00	8.74E-02	0.00E+00	0.00E+00	5.45E-01	3.82E+00	3.82E+00	3
911	17.490	16.998	2	0.00E+00	5.18E-04	0.00E+00	1.80E-06	1.48E-03	1.04E-02	1.04E-02	1
913	17.539	17.001	2	1.51E-02	3.92E+02	2.11E-02	2.95E-01	1.12E+03	7.84E+03	7.84E+03	8
936	17.843	17.001	2	1.62E-06	8.46E+00	2.27E-06	2.46E-03	2.42E+01	1.69E+02	1.69E+02	8
956	17.792	17.000	2	1.96E-02	4.40E+02	2.74E-02	3.93E-01	1.26E+03	8.82E+03	8.82E+03	8
957	17.746	16.997	2	0.00E+00	1.05E-03	0.00E+00	2.37E-06	3.02E-03	2.11E-02	2.11E-02	1
967	17.841	16.917	1	1.56E-06	1.15E+01	2.18E-06	3.45E-03	3.28E+01	2.30E+02	2.30E+02	8
986	17.597	17.004	1	6.24E-07	3.52E+00	8.74E-07	1.10E-03	1.01E+01	7.07E+01	7.07E+01	7

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				12 rounds at aimpoint (17.60, 18.20)								
282	17.696	17.960	2	7.59E+01	5.57E+03	1.06E+02	7.59E+01	5.57E+03	3.91E+04	3.92E+04	8	
284	17.741	17.997	2	1.73E+01	1.60E+03	2.42E+01	1.73E+01	1.60E+03	1.12E+04	1.12E+04	8	
285	17.693	18.039	2	5.21E+01	4.36E+03	7.29E+01	5.21E+01	4.36E+03	3.06E+04	3.07E+04	8	
403	17.533	17.964	7	4.10E+01	3.05E+03	5.74E+01	4.10E+01	3.05E+03	2.14E+04	2.15E+04	8	
426	17.792	17.981	3	6.14E+01	4.84E+03	8.60E+01	6.14E+01	4.84E+03	3.40E+04	3.41E+04	8	
479	17.571	18.054	4	2.63E+01	2.30E+03	3.68E+01	2.63E+01	2.30E+03	1.61E+04	1.62E+04	8	
768	18.003	14.798	7	2.43E-01	1.06E+00	3.40E-01	2.43E-01	1.06E+00	7.76E+00	8.10E+00	4	
774	17.506	14.808	6	8.85E-01	3.08E+00	1.24E+00	8.85E-01	3.08E+00	2.28E+01	2.40E+01	5	
776	17.999	14.606	4	2.55E-01	8.28E-01	3.57E-01	2.55E-01	8.28E-01	6.15E+00	6.51E+00	4	
846	17.548	14.720	33	8.33E-01	2.72E+00	1.17E+00	8.33E-01	2.72E+00	2.02E+01	2.14E+01	5	
847	17.452	14.713	7	7.83E-01	2.37E+00	1.10E+00	7.83E-01	2.37E+00	1.77E+01	1.88E+01	5	
848	17.619	14.598	28	7.53E-01	2.19E+00	1.05E+00	7.53E-01	2.19E+00	1.64E+01	1.74E+01	5	
849	17.847	14.523	14	6.91E-01	1.90E+00	9.67E-01	6.91E-01	1.90E+00	1.43E+01	1.52E+01	5	
850	17.645	14.519	5	6.87E-01	1.89E+00	9.62E-01	6.87E-01	1.89E+00	1.42E+01	1.52E+01	5	
851	17.522	14.526	16	7.06E-01	1.92E+00	9.88E-01	7.06E-01	1.92E+00	1.44E+01	1.54E+01	5	

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

856	17.750	14.796	9	8.99E-01	3.08E+00	1.26E+00	8.99E-01	3.08E+00	2.28E+01	2.41E+01	5
864	17.794	14.710	24	8.33E-01	2.68E+00	1.17E+00	8.33E-01	2.68E+00	1.99E+01	2.11E+01	5
868	17.645	14.717	10	8.32E-01	2.72E+00	1.16E+00	8.32E-01	2.72E+00	2.02E+01	2.14E+01	5
872	17.453	14.800	1	8.37E-01	2.72E+00	1.17E+00	8.37E-01	2.72E+00	2.02E+01	2.14E+01	5
883	17.944	14.715	6	6.24E-01	1.90E+00	8.74E-01	6.24E-01	1.90E+00	1.42E+01	1.50E+01	5
885	17.712	14.726	1	8.40E-01	2.75E+00	1.18E+00	8.40E-01	2.75E+00	2.04E+01	2.16E+01	5
911	17.490	16.998	2	8.53E+00	1.78E+02	1.19E+01	8.53E+00	1.78E+02	1.26E+03	1.27E+03	8
913	17.539	17.001	2	1.02E+01	2.21E+02	1.43E+01	1.02E+01	2.21E+02	1.56E+03	1.58E+03	8
914	18.004	17.005	3	1.56E-01	3.14E+00	2.18E-01	1.56E-01	3.14E+00	2.22E+01	2.24E+01	5
915	17.953	16.928	3	8.35E+00	1.77E+02	1.17E+01	8.35E+00	1.77E+02	1.25E+03	1.26E+03	8
916	18.006	16.927	3	1.99E-01	3.85E+00	2.79E-01	1.99E-01	3.85E+00	2.72E+01	2.75E+01	5
917	18.056	16.923	3	6.64E-05	0.00E+00	9.30E-05	6.64E-05	0.00E+00	9.30E-05	1.86E-04	1
918	18.099	16.922	4	1.51E-06	0.00E+00	2.11E-06	1.51E-06	0.00E+00	2.11E-06	4.23E-06	1
919	17.894	16.929	2	7.15E+00	1.43E+02	1.00E+01	7.15E+00	1.43E+02	1.01E+03	1.02E+03	8
934	17.893	16.999	2	8.27E+00	1.72E+02	1.16E+01	8.27E+00	1.72E+02	1.22E+03	1.23E+03	8
936	17.843	17.001	2	1.04E+01	2.28E+02	1.46E+01	1.04E+01	2.28E+02	1.61E+03	1.63E+03	8
953	18.055	17.000	3	5.13E-05	0.00E+00	7.18E-05	5.13E-05	0.00E+00	7.18E-05	1.44E-04	1
954	18.098	16.998	3	2.30E-06	0.00E+00	3.22E-06	2.30E-06	0.00E+00	3.22E-06	6.44E-06	1
956	17.792	17.000	2	8.30E+00	1.72E+02	1.16E+01	8.30E+00	1.72E+02	1.22E+03	1.23E+03	8
957	17.746	16.997	2	1.05E+01	2.30E+02	1.47E+01	1.05E+01	2.30E+02	1.62E+03	1.64E+03	8
958	17.696	16.997	2	8.10E+00	1.67E+02	1.13E+01	8.10E+00	1.67E+02	1.18E+03	1.19E+03	8
967	17.841	16.917	1	8.59E+00	1.80E+02	1.20E+01	8.59E+00	1.80E+02	1.27E+03	1.28E+03	8
986	17.597	17.004	1	8.16E+00	1.69E+02	1.14E+01	8.16E+00	1.69E+02	1.19E+03	1.21E+03	8
988	17.649	17.006	2	1.10E+01	2.44E+02	1.54E+01	1.10E+01	2.44E+02	1.72E+03	1.74E+03	8
997	17.947	17.000	2	1.02E+01	2.25E+02	1.43E+01	1.02E+01	2.25E+02	1.59E+03	1.60E+03	8

Case 2: Protected 12 rounds at aimpoint (17.60, 18.20)

282	17.696	17.960	2	2.73E-02	1.86E+03	3.82E-02	4.69E-01	5.31E+03	3.72E+04	3.72E+04	8
284	17.741	17.997	2	5.71E-03	5.34E+02	7.99E-03	9.51E-02	1.53E+03	1.07E+04	1.07E+04	8
285	17.693	18.039	2	1.74E-02	1.45E+03	2.44E-02	2.99E-01	4.16E+03	2.91E+04	2.91E+04	8
403	17.533	17.964	7	1.48E-02	1.02E+03	2.07E-02	2.58E-01	2.91E+03	2.04E+04	2.04E+04	8
426	17.792	17.981	3	1.99E-02	1.61E+03	2.79E-02	3.61E-01	4.61E+03	3.23E+04	3.23E+04	8
479	17.571	18.054	4	8.32E-03	7.66E+02	1.16E-02	1.48E-01	2.19E+03	1.53E+04	1.53E+04	8
768	18.003	14.798	7	1.95E-02	0.00E+00	2.73E-02	1.40E-01	9.88E-01	7.11E+00	7.14E+00	4
774	17.506	14.808	6	8.74E-02	1.89E-03	1.22E-01	5.51E-01	2.86E+00	2.08E+01	2.09E+01	5
776	17.999	14.606	4	2.60E-03	0.00E+00	3.64E-03	1.53E-01	7.70E-01	5.60E+00	5.61E+00	3
846	17.548	14.720	33	5.05E-02	0.00E+00	7.07E-02	5.32E-01	2.53E+00	1.85E+01	1.85E+01	5
847	17.452	14.713	7	4.90E-02	0.00E+00	6.86E-02	5.17E-01	2.20E+00	1.61E+01	1.62E+01	5
848	17.619	14.598	28	1.05E-02	0.00E+00	1.47E-02	5.01E-01	2.04E+00	1.50E+01	1.50E+01	4
849	17.847	14.523	14	4.43E-03	0.00E+00	6.20E-03	4.65E-01	1.77E+00	1.30E+01	1.30E+01	4
850	17.645	14.519	5	6.59E-03	0.00E+00	9.23E-03	4.63E-01	1.76E+00	1.30E+01	1.30E+01	4
851	17.522	14.526	16	7.54E-03	0.00E+00	1.06E-02	4.79E-01	1.79E+00	1.32E+01	1.32E+01	4
856	17.750	14.796	9	6.84E-02	0.00E+00	9.58E-02	5.66E-01	2.87E+00	2.09E+01	2.10E+01	5
864	17.794	14.710	24	4.44E-02	0.00E+00	6.22E-02	5.36E-01	2.50E+00	1.83E+01	1.83E+01	5
868	17.645	14.717	10	4.84E-02	0.00E+00	6.78E-02	5.32E-01	2.53E+00	1.85E+01	1.85E+01	5
872	17.453	14.800	1	7.76E-02	0.00E+00	1.09E-01	5.31E-01	2.53E+00	1.85E+01	1.86E+01	5
883	17.944	14.715	6	3.28E-02	0.00E+00	4.59E-02	4.10E-01	1.77E+00	1.30E+01	1.30E+01	4
885	17.712	14.726	1	4.99E-02	0.00E+00	6.99E-02	5.37E-01	2.56E+00	1.87E+01	1.87E+01	5
911	17.490	16.998	2	9.00E-02	5.94E+01	1.26E-01	2.82E-01	1.70E+02	1.19E+03	1.19E+03	8
913	17.539	17.001	2	7.81E-02	7.36E+01	1.09E-01	2.59E-01	2.11E+02	1.48E+03	1.48E+03	8
914	18.004	17.005	3	4.69E-09	1.05E+00	6.57E-09	1.12E-05	2.99E+00	2.09E+01	2.09E+01	5
915	17.953	16.928	3	8.06E-02	5.91E+01	1.13E-01	2.60E-01	1.69E+02	1.18E+03	1.18E+03	8
916	18.006	16.927	3	0.00E+00	1.28E+00	0.00E+00	8.44E-06	3.67E+00	2.57E+01	2.57E+01	5
919	17.894	16.929	2	1.00E-01	4.78E+01	1.40E-01	3.07E-01	1.37E+02	9.59E+02	9.60E+02	8
934	17.893	16.999	2	8.99E-02	5.74E+01	1.26E-01	2.80E-01	1.64E+02	1.15E+03	1.15E+03	8
936	17.843	17.001	2	7.64E-02	7.61E+01	1.07E-01	2.56E-01	2.18E+02	1.53E+03	1.53E+03	8
956	17.792	17.000	2	8.95E-02	5.75E+01	1.25E-01	2.80E-01	1.64E+02	1.15E+03	1.15E+03	8
957	17.746	16.997	2	7.62E-02	7.67E+01	1.07E-01	2.57E-01	2.19E+02	1.53E+03	1.53E+03	8
958	17.696	16.997	2	8.97E-02	5.56E+01	1.26E-01	2.79E-01	1.59E+02	1.11E+03	1.11E+03	8
967	17.841	16.917	1	9.22E-02	5.99E+01	1.29E-01	2.92E-01	1.71E+02	1.20E+03	1.20E+03	8
986	17.597	17.004	1	9.01E-02	5.64E+01	1.26E-01	2.80E-01	1.61E+02	1.13E+03	1.13E+03	8
988	17.649	17.006	2	7.26E-02	8.13E+01	1.02E-01	2.50E-01	2.32E+02	1.62E+03	1.62E+03	8
997	17.947	17.000	2	7.42E-02	7.50E+01	1.04E-01	2.49E-01	2.14E+02	1.50E+03	1.50E+03	8

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 24 rounds at aimpoint (17.65, 20.00)

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

282	17.696	17.960	2	5.34E+00	6.39E+01	7.48E+00	5.34E+00	6.39E+01	4.55E+02	4.62E+02	8
284	17.741	17.997	2	5.14E+00	6.20E+01	7.20E+00	5.14E+00	6.20E+01	4.41E+02	4.48E+02	8
285	17.693	18.039	2	5.88E+00	7.61E+01	8.23E+00	5.88E+00	7.61E+01	5.41E+02	5.49E+02	8
403	17.533	17.964	7	5.09E+00	6.01E+01	7.13E+00	5.09E+00	6.01E+01	4.28E+02	4.35E+02	8
426	17.792	17.981	3	5.41E+00	6.56E+01	7.57E+00	5.41E+00	6.56E+01	4.67E+02	4.74E+02	8
479	17.571	18.054	4	5.74E+00	7.41E+01	8.04E+00	5.74E+00	7.41E+01	5.27E+02	5.35E+02	8
658	18.138	17.962	7	1.69E-03	7.41E-02	2.37E-03	1.69E-03	7.41E-02	5.21E-01	5.23E-01	2
761	17.998	18.471	4	1.22E+01	2.36E+02	1.71E+01	1.22E+01	2.36E+02	1.67E+03	1.69E+03	8
767	17.905	18.470	4	1.28E+01	2.42E+02	1.79E+01	1.28E+01	2.42E+02	1.71E+03	1.73E+03	8
768	18.003	14.798	7	7.26E-01	5.79E-01	1.02E+00	7.26E-01	5.79E-01	5.07E+00	6.09E+00	4
774	17.506	14.808	6	1.02E+00	7.93E-01	1.43E+00	1.02E+00	7.93E-01	6.98E+00	8.41E+00	4
776	17.999	14.606	4	6.36E-01	4.98E-01	8.90E-01	6.36E-01	4.98E-01	4.38E+00	5.27E+00	3
823	17.948	18.476	2	1.04E+01	1.88E+02	1.46E+01	1.04E+01	1.88E+02	1.33E+03	1.35E+03	8
846	17.548	14.720	33	1.01E+00	8.32E-01	1.41E+00	1.01E+00	8.32E-01	7.24E+00	8.65E+00	4
847	17.452	14.713	7	6.75E-01	5.38E-01	9.45E-01	6.75E-01	5.38E-01	4.71E+00	5.66E+00	3
848	17.619	14.598	28	9.40E-01	7.79E-01	1.32E+00	9.40E-01	7.79E-01	6.77E+00	8.09E+00	4
849	17.847	14.523	14	8.61E-01	7.47E-01	1.21E+00	8.61E-01	7.47E-01	6.43E+00	7.64E+00	4
850	17.645	14.519	5	8.44E-01	7.42E-01	1.18E+00	8.44E-01	7.42E-01	6.38E+00	7.56E+00	4
851	17.522	14.526	16	8.31E-01	6.35E-01	1.16E+00	8.31E-01	6.35E-01	5.61E+00	6.77E+00	4
852	17.775	18.473	40	1.16E+01	2.17E+02	1.62E+01	1.16E+01	2.17E+02	1.54E+03	1.55E+03	8
854	17.942	18.391	2	8.90E+00	1.49E+02	1.25E+01	8.90E+00	1.49E+02	1.06E+03	1.07E+03	8
855	17.799	18.399	5	1.07E+01	1.91E+02	1.50E+01	1.07E+01	1.91E+02	1.35E+03	1.37E+03	8
856	17.750	14.796	9	1.10E+00	9.29E-01	1.54E+00	1.10E+00	9.29E-01	8.04E+00	9.58E+00	4
864	17.794	14.710	24	1.04E+00	8.76E-01	1.46E+00	1.04E+00	8.76E-01	7.59E+00	9.04E+00	4
868	17.645	14.717	10	1.02E+00	8.84E-01	1.43E+00	1.02E+00	8.84E-01	7.62E+00	9.04E+00	4
872	17.453	14.800	1	7.20E-01	5.79E-01	1.01E+00	7.20E-01	5.79E-01	5.06E+00	6.07E+00	4
883	17.944	14.715	6	9.53E-01	7.47E-01	1.33E+00	9.53E-01	7.47E-01	6.56E+00	7.90E+00	4
885	17.712	14.726	1	1.05E+00	8.87E-01	1.47E+00	1.05E+00	8.87E-01	7.68E+00	9.15E+00	4
886	17.630	18.485	1	1.16E+01	2.17E+02	1.62E+01	1.16E+01	2.17E+02	1.54E+03	1.55E+03	8
911	17.490	16.998	2	2.33E+00	9.26E+00	3.26E+00	2.33E+00	9.26E+00	6.81E+01	7.13E+01	7
913	17.539	17.001	2	2.54E+00	1.05E+01	3.56E+00	2.54E+00	1.05E+01	7.71E+01	8.06E+01	8
914	18.004	17.005	3	1.75E+00	7.21E+00	2.45E+00	1.75E+00	7.21E+00	5.29E+01	5.54E+01	7
915	17.953	16.928	3	2.35E+00	8.89E+00	3.29E+00	2.35E+00	8.89E+00	6.55E+01	6.88E+01	7
916	18.006	16.927	3	1.66E+00	6.36E+00	2.32E+00	1.66E+00	6.36E+00	4.68E+01	4.92E+01	6
917	18.056	16.923	3	6.90E-01	2.99E+00	9.66E-01	6.90E-01	2.99E+00	2.19E+01	2.29E+01	5
918	18.099	16.922	4	1.21E-01	8.31E-01	1.69E-01	1.21E-01	8.31E-01	5.99E+00	6.16E+00	4
919	17.894	16.929	2	2.51E+00	9.79E+00	3.51E+00	2.51E+00	9.79E+00	7.20E+01	7.56E+01	8
934	17.893	16.999	2	2.56E+00	1.06E+01	3.58E+00	2.56E+00	1.06E+01	7.78E+01	8.14E+01	8
935	18.196	17.004	3	1.91E-06	0.00E+00	2.67E-06	1.91E-06	0.00E+00	2.67E-06	5.35E-06	1
936	17.843	17.001	2	2.56E+00	1.06E+01	3.58E+00	2.56E+00	1.06E+01	7.78E+01	8.14E+01	8
952	18.150	17.000	3	2.39E-05	0.00E+00	3.35E-05	2.39E-05	0.00E+00	3.35E-05	6.69E-05	1
953	18.055	17.000	3	7.07E-01	3.29E+00	9.90E-01	7.07E-01	3.29E+00	2.40E+01	2.50E+01	5
954	18.098	16.998	3	1.27E-01	9.07E-01	1.78E-01	1.27E-01	9.07E-01	6.53E+00	6.70E+00	4
956	17.792	17.000	2	2.56E+00	1.06E+01	3.58E+00	2.56E+00	1.06E+01	7.78E+01	8.14E+01	8
957	17.746	16.997	2	2.55E+00	1.06E+01	3.57E+00	2.55E+00	1.06E+01	7.78E+01	8.13E+01	8
958	17.696	16.997	2	2.56E+00	1.07E+01	3.58E+00	2.56E+00	1.07E+01	7.85E+01	8.21E+01	8
965	18.196	16.903	1	1.91E-06	0.00E+00	2.67E-06	1.91E-06	0.00E+00	2.67E-06	5.35E-06	1
966	18.145	16.907	1	1.10E-02	7.78E-02	1.54E-02	1.10E-02	7.78E-02	5.60E-01	5.75E-01	2
967	17.841	16.917	1	2.50E+00	9.66E+00	3.50E+00	2.50E+00	9.66E+00	7.11E+01	7.46E+01	7
986	17.597	17.004	1	2.58E+00	1.08E+01	3.61E+00	2.58E+00	1.08E+01	7.92E+01	8.28E+01	8
988	17.649	17.006	2	2.56E+00	1.07E+01	3.58E+00	2.56E+00	1.07E+01	7.85E+01	8.21E+01	8
997	17.947	17.000	2	2.45E+00	9.88E+00	3.43E+00	2.45E+00	9.88E+00	7.26E+01	7.60E+01	8

Case 2: Protected 24 rounds at aimpoint (17.65, 20.00)

282	17.696	17.960	2	4.46E-01	2.12E+01	6.24E-01	1.29E+00	6.09E+01	4.28E+02	4.29E+02	8
284	17.741	17.997	2	4.15E-01	2.05E+01	5.81E-01	1.21E+00	5.91E+01	4.15E+02	4.16E+02	8
285	17.693	18.039	2	4.17E-01	2.53E+01	5.84E-01	1.21E+00	7.26E+01	5.10E+02	5.10E+02	8
403	17.533	17.964	7	4.34E-01	1.99E+01	6.08E-01	1.25E+00	5.73E+01	4.03E+02	4.03E+02	8
426	17.792	17.981	3	4.39E-01	2.17E+01	6.15E-01	1.27E+00	6.25E+01	4.39E+02	4.40E+02	8
479	17.571	18.054	4	4.06E-01	2.46E+01	5.68E-01	1.17E+00	7.07E+01	4.97E+02	4.97E+02	8
658	18.138	17.962	7	0.00E+00	2.47E-02	0.00E+00	0.00E+00	7.07E-02	4.95E-01	4.95E-01	2
761	17.998	18.471	4	2.40E-01	7.86E+01	3.36E-01	7.24E-01	2.25E+02	1.58E+03	1.58E+03	8
767	17.905	18.470	4	2.55E-01	8.08E+01	3.57E-01	7.72E-01	2.31E+02	1.62E+03	1.62E+03	8
768	18.003	14.798	7	0.00E+00	0.00E+00	0.00E+00	5.95E-01	5.39E-01	4.61E+00	4.61E+00	3
774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	8.62E-01	7.38E-01	6.37E+00	6.37E+00	4
776	17.999	14.606	4	0.00E+00	0.00E+00	0.00E+00	5.24E-01	4.63E-01	3.97E+00	3.97E+00	3
823	17.948	18.476	2	2.59E-01	6.26E+01	3.63E-01	7.78E-01	1.79E+02	1.25E+03	1.25E+03	8
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	8.39E-01	7.74E-01	6.59E+00	6.59E+00	4
847	17.452	14.713	7	0.00E+00	0.00E+00	0.00E+00	5.61E-01	5.01E-01	4.29E+00	4.29E+00	3
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	7.83E-01	7.25E-01	6.17E+00	6.17E+00	4
849	17.847	14.523	14	0.00E+00	0.00E+00	0.00E+00	7.03E-01	6.95E-01	5.85E+00	5.85E+00	3
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	6.97E-01	6.90E-01	5.81E+00	5.81E+00	3
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	6.94E-01	5.91E-01	5.11E+00	5.11E+00	3
823	17.948	18.476	2	0.00E+00	0.00E+00	0.00E+00	7.78E-01	1.79E+02	1.25E+03	1.25E+03	8

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

852	17.775	18.473	40	2.56E-01	7.23E+01	3.58E-01	7.72E-01	2.07E+02	1.45E+03	1.45E+03	8
854	17.942	18.391	2	2.86E-01	4.97E+01	4.00E-01	8.48E-01	1.42E+02	9.95E+02	9.96E+02	8
855	17.799	18.399	5	2.84E-01	6.35E+01	3.98E-01	8.47E-01	1.82E+02	1.28E+03	1.28E+03	8
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	9.12E-01	8.64E-01	7.32E+00	7.32E+00	4
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	8.59E-01	8.15E-01	6.91E+00	6.91E+00	4
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	8.36E-01	8.22E-01	6.92E+00	6.92E+00	4
872	17.453	14.800	1	0.00E+00	0.00E+00	0.00E+00	6.03E-01	5.38E-01	4.61E+00	4.61E+00	3
883	17.944	14.715	6	0.00E+00	0.00E+00	0.00E+00	8.00E-01	6.95E-01	5.99E+00	5.99E+00	3
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	8.68E-01	8.25E-01	6.99E+00	6.99E+00	4
886	17.630	18.485	1	2.53E-01	7.22E+01	3.54E-01	7.65E-01	2.06E+02	1.44E+03	1.44E+03	8
911	17.490	16.998	2	4.81E-01	1.73E+00	6.73E-01	1.48E+00	8.73E+00	6.32E+01	6.39E+01	7
913	17.539	17.001	2	5.15E-01	1.98E+00	7.21E-01	1.58E+00	9.86E+00	7.12E+01	7.20E+01	7
914	18.004	17.005	3	3.53E-01	1.47E+00	4.94E-01	1.10E+00	6.80E+00	4.91E+01	4.96E+01	6
915	17.953	16.928	3	4.55E-01	1.37E+00	6.37E-01	1.52E+00	8.37E+00	6.07E+01	6.14E+01	7
916	18.006	16.927	3	3.19E-01	1.02E+00	4.47E-01	1.06E+00	5.99E+00	4.34E+01	4.39E+01	6
917	18.056	16.923	3	1.23E-01	4.68E-01	1.72E-01	4.13E-01	2.82E+00	2.03E+01	2.05E+01	5
918	18.099	16.922	4	1.02E-02	1.24E-01	1.43E-02	4.32E-02	7.82E-01	5.53E+00	5.55E+00	3
919	17.894	16.929	2	4.74E-01	1.48E+00	6.64E-01	1.59E+00	9.21E+00	6.67E+01	6.74E+01	7
934	17.893	16.999	2	5.06E-01	2.00E+00	7.08E-01	1.60E+00	9.99E+00	7.22E+01	7.29E+01	7
936	17.843	17.001	2	5.07E-01	2.00E+00	7.10E-01	1.59E+00	1.00E+01	7.22E+01	7.29E+01	7
953	18.055	17.000	3	1.33E-01	6.61E-01	1.86E-01	4.12E-01	3.11E+00	2.23E+01	2.25E+01	5
954	18.098	16.998	3	1.30E-02	1.81E-01	1.82E-02	4.41E-02	8.56E-01	6.05E+00	6.07E+00	4
956	17.792	17.000	2	5.07E-01	2.02E+00	7.10E-01	1.59E+00	1.00E+01	7.22E+01	7.29E+01	7
957	17.746	16.997	2	5.09E-01	1.98E+00	7.13E-01	1.59E+00	9.97E+00	7.20E+01	7.27E+01	7
958	17.696	16.997	2	5.09E-01	2.01E+00	7.13E-01	1.59E+00	1.01E+01	7.29E+01	7.36E+01	7
966	18.145	16.907	1	7.63E-04	1.08E-02	1.07E-03	3.61E-03	7.31E-02	5.17E-01	5.18E-01	2
967	17.841	16.917	1	4.68E-01	1.37E+00	6.55E-01	1.59E+00	9.08E+00	6.58E+01	6.64E+01	7
986	17.597	17.004	1	5.17E-01	2.08E+00	7.24E-01	1.60E+00	1.02E+01	7.36E+01	7.44E+01	7
988	17.649	17.006	2	5.14E-01	2.07E+00	7.20E-01	1.59E+00	1.01E+01	7.29E+01	7.36E+01	7
997	17.947	17.000	2	4.97E-01	1.90E+00	6.96E-01	1.55E+00	9.32E+00	6.74E+01	6.81E+01	7

VX 250kg TBM
Light Attack
Height of Release: 500m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 1 round at aimpoint (17.90, 20.00)											
282	17.696	17.960	2	4.47E-02	1.23E-01	6.26E-02	4.47E-02	1.23E-01	9.24E-01	9.86E-01	2
284	17.741	17.997	2	3.24E-01	3.49E+00	4.54E-01	3.24E-01	3.49E+00	2.49E+01	2.53E+01	5
285	17.693	18.039	2	3.56E-02	0.00E+00	4.98E-02	3.56E-02	0.00E+00	4.98E-02	9.97E-02	1
403	17.533	17.964	7	7.99E-06	0.00E+00	1.12E-05	7.99E-06	0.00E+00	1.12E-05	2.24E-05	1
426	17.792	17.981	3	6.93E-01	3.18E+01	9.70E-01	6.93E-01	3.18E+01	2.24E+02	2.25E+02	8
479	17.571	18.054	4	1.36E-05	0.00E+00	1.90E-05	1.36E-05	0.00E+00	1.90E-05	3.81E-05	1
524	18.297	18.033	2	6.11E-07	0.00E+00	8.55E-07	6.11E-07	0.00E+00	8.55E-07	1.71E-06	1
525	18.296	17.953	2	9.92E-07	0.00E+00	1.39E-06	9.92E-07	0.00E+00	1.39E-06	2.78E-06	1
658	18.138	17.962	7	2.88E-02	3.06E-02	4.03E-02	2.88E-02	3.06E-02	2.55E-01	2.95E-01	2
734	18.172	18.053	4	1.03E-02	0.00E+00	1.44E-02	1.03E-02	0.00E+00	1.44E-02	2.88E-02	1
761	17.998	18.471	4	2.47E-01	1.01E+01	3.46E-01	2.47E-01	1.01E+01	7.10E+01	7.14E+01	7
767	17.905	18.470	4	3.29E+00	2.24E+02	4.61E+00	3.29E+00	2.24E+02	1.57E+03	1.58E+03	8
768	18.003	14.798	7	1.37E+00	4.00E+01	1.92E+00	1.37E+00	4.00E+01	2.82E+02	2.84E+02	8
774	17.506	14.808	6	1.09E-01	1.67E+00	1.53E-01	1.09E-01	1.67E+00	1.18E+01	1.20E+01	4
776	17.999	14.606	4	1.36E+00	3.85E+01	1.90E+00	1.36E+00	3.85E+01	2.71E+02	2.73E+02	8
793	18.439	15.487	3	1.64E-05	0.00E+00	2.30E-05	1.64E-05	0.00E+00	2.30E-05	4.59E-05	1
794	18.489	15.483	3	2.98E-06	0.00E+00	4.17E-06	2.98E-06	0.00E+00	4.17E-06	8.34E-06	1
799	18.400	15.488	4	2.68E-05	0.00E+00	3.75E-05	2.68E-05	0.00E+00	3.75E-05	7.50E-05	1
805	18.490	15.405	3	3.12E-06	0.00E+00	4.37E-06	3.12E-06	0.00E+00	4.37E-06	8.74E-06	1
823	17.948	18.476	2	1.87E+00	9.91E+01	2.62E+00	1.87E+00	9.91E+01	6.96E+02	6.99E+02	8
846	17.548	14.720	33	1.74E-01	3.59E+00	2.44E-01	1.74E-01	3.59E+00	2.54E+01	2.56E+01	5
847	17.452	14.713	7	5.54E-02	4.62E-01	7.76E-02	5.54E-02	4.62E-01	3.31E+00	3.39E+00	3
848	17.619	14.598	28	3.57E-01	9.67E+00	5.00E-01	3.57E-01	9.67E+00	6.82E+01	6.87E+01	7
849	17.847	14.523	14	1.46E+00	4.30E+01	2.04E+00	1.46E+00	4.30E+01	3.03E+02	3.05E+02	8
850	17.645	14.519	5	4.93E-01	1.27E+01	6.90E-01	4.93E-01	1.27E+01	8.96E+01	9.03E+01	8
851	17.522	14.526	16	1.52E-01	2.73E+00	2.13E-01	1.52E-01	2.73E+00	1.93E+01	1.95E+01	5
852	17.775	18.473	40	1.36E-01	3.27E+00	1.90E-01	1.36E-01	3.27E+00	2.31E+01	2.33E+01	5
854	17.942	18.391	2	2.20E+00	1.26E+02	3.08E+00	2.20E+00	1.26E+02	8.88E+02	8.88E+02	8
855	17.799	18.399	5	1.98E-01	9.08E+00	2.77E-01	1.98E-01	9.08E+00	6.38E+01	6.41E+01	7
856	17.750	14.796	9	1.07E+00	3.11E+01	1.50E+00	1.07E+00	3.11E+01	2.19E+02	2.21E+02	8
864	17.794	14.710	24	1.33E+00	3.85E+01	1.86E+00	1.33E+00	3.85E+01	2.71E+02	2.73E+02	8
868	17.645	14.717	10	4.80E-01	1.26E+01	6.72E-01	4.80E-01	1.26E+01	8.89E+01	8.95E+01	8

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

872	17.453	14.800	1	5.34E-02	4.19E-01	7.48E-02	5.34E-02	4.19E-01	3.01E+00	3.08E+00	3
883	17.944	14.715	6	1.54E+00	4.66E+01	2.16E+00	1.54E+00	4.66E+01	3.28E+02	3.31E+02	8
885	17.712	14.726	1	8.35E-01	2.35E+01	1.17E+00	8.35E-01	2.35E+01	1.66E+02	1.67E+02	8
886	17.630	18.485	1	3.11E-05	0.00E+00	4.35E-05	3.11E-05	0.00E+00	4.35E-05	8.71E-05	1
887	18.486	15.329	3	4.92E-06	0.00E+00	6.89E-06	4.92E-06	0.00E+00	6.89E-06	1.38E-05	1
890	18.440	15.406	2	1.87E-05	0.00E+00	2.62E-05	1.87E-05	0.00E+00	2.62E-05	5.24E-05	1
911	17.490	16.998	2	3.89E-05	0.00E+00	5.45E-05	3.89E-05	0.00E+00	5.45E-05	1.09E-04	1
913	17.539	17.001	2	2.13E-02	0.00E+00	2.98E-02	2.13E-02	0.00E+00	2.98E-02	5.96E-02	1
914	18.004	17.005	3	1.54E+00	6.38E+01	2.16E+00	1.54E+00	6.38E+01	4.49E+02	4.51E+02	8
915	17.953	16.928	3	2.25E+00	1.03E+02	3.15E+00	2.25E+00	1.03E+02	7.24E+02	7.27E+02	8
916	18.006	16.927	3	1.56E+00	6.26E+01	2.18E+00	1.56E+00	6.26E+01	4.40E+02	4.43E+02	8
917	18.056	16.923	3	9.14E-01	2.94E+01	1.28E+00	9.14E-01	2.94E+01	2.07E+02	2.08E+02	8
918	18.099	16.922	4	3.58E-01	1.17E+01	5.01E-01	3.58E-01	1.17E+01	8.24E+01	8.29E+01	8
919	17.894	16.929	2	2.86E+00	1.19E+02	4.00E+00	2.86E+00	1.19E+02	8.37E+02	8.41E+02	8
934	17.893	16.999	2	2.89E+00	1.22E+02	4.05E+00	2.89E+00	1.22E+02	8.58E+02	8.62E+02	8
935	18.196	17.004	3	6.48E-02	1.89E-01	9.07E-02	6.48E-02	1.89E-01	1.41E+00	1.50E+00	2
936	17.843	17.001	2	2.20E+00	1.01E+02	3.08E+00	2.20E+00	1.01E+02	7.10E+02	7.13E+02	8
952	18.150	17.000	3	1.85E-01	2.38E+00	2.59E-01	1.85E-01	2.38E+00	1.69E+01	1.72E+01	5
953	18.055	17.000	3	8.91E-01	2.85E+01	1.25E+00	8.91E-01	2.85E+01	2.01E+02	2.02E+02	8
954	18.098	16.998	3	3.42E-01	1.10E+01	4.79E-01	3.42E-01	1.10E+01	7.75E+01	7.80E+01	8
956	17.792	17.000	2	1.49E+00	6.09E+01	2.09E+00	1.49E+00	6.09E+01	4.28E+02	4.30E+02	8
957	17.746	16.997	2	9.05E-01	2.89E+01	1.27E+00	9.05E-01	2.89E+01	2.04E+02	2.05E+02	8
958	17.696	16.997	2	3.06E-01	9.62E+00	4.28E-01	3.06E-01	9.62E+00	6.78E+01	6.82E+01	7
962	18.350	16.901	1	2.51E-05	0.00E+00	3.51E-05	2.51E-05	0.00E+00	3.51E-05	7.03E-05	1
963	18.299	16.903	1	6.86E-04	0.00E+00	9.60E-04	6.86E-04	0.00E+00	9.60E-04	1.92E-03	1
964	18.250	16.903	1	3.18E-02	0.00E+00	4.45E-02	3.18E-02	0.00E+00	4.45E-02	8.90E-02	1
965	18.196	16.903	1	7.52E-02	5.07E-01	1.05E-01	7.52E-02	5.07E-01	3.65E+00	3.76E+00	3
966	18.145	16.907	1	2.21E-01	3.88E+00	3.09E-01	2.21E-01	3.88E+00	2.75E+01	2.78E+01	5
967	17.841	16.917	1	2.17E+00	9.77E+01	3.04E+00	2.17E+00	9.77E+01	6.87E+02	6.90E+02	8
986	17.597	17.004	1	5.28E-02	0.00E+00	7.39E-02	5.28E-02	0.00E+00	7.39E-02	1.48E-01	1
988	17.649	17.006	2	1.81E-01	2.30E+00	2.53E-01	1.81E-01	2.30E+00	1.64E+01	1.66E+01	5
997	17.947	17.000	2	2.34E+00	1.08E+02	3.28E+00	2.34E+00	1.08E+02	7.59E+02	7.63E+02	8

Case 2: Protected 1 round at aimpoint (17.65, 16.30)

774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-01	2.04E+00	2.04E+00	2
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E+00	2.07E+01	2.07E+01	5
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E+01	2.14E+02	2.14E+02	8
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.66E+00	6.06E+01	6.06E+01	7
851	17.522	14.526	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-01	1.29E+00	1.29E+00	2
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E+00	1.76E+01	1.76E+01	5
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-01	2.64E+00	2.64E+00	2
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E+02	7.14E+02	7.14E+02	8
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E+01	2.44E+02	2.44E+02	8

VX 500kg TBM
Moderate Attack
Height of Release: 800m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				2 rounds at aimpoint (19.65, 19.90)							
38	18.902	18.161	2	1.88E-01	3.40E+01	2.63E-01	1.88E-01	3.40E+01	2.38E+02	2.39E+02	8
40	18.900	18.232	2	1.76E-01	3.19E+01	2.46E-01	1.76E-01	3.19E+01	2.24E+02	2.24E+02	8
42	18.948	18.195	2	2.23E-01	4.14E+01	3.12E-01	2.23E-01	4.14E+01	2.90E+02	2.90E+02	8
147	18.748	18.163	7	1.20E-01	1.41E+01	1.68E-01	1.20E-01	1.41E+01	9.89E+01	9.90E+01	8
154	18.999	18.190	3	2.67E-01	5.31E+01	3.74E-01	2.67E-01	5.31E+01	3.72E+02	3.72E+02	8
220	18.777	18.253	4	1.16E-01	1.48E+01	1.62E-01	1.16E-01	1.48E+01	1.04E+02	1.04E+02	8
282	17.696	17.960	2	7.46E-08	0.00E+00	1.04E-07	7.46E-08	0.00E+00	1.04E-07	2.09E-07	1
284	17.741	17.997	2	1.31E-07	0.00E+00	1.83E-07	1.31E-07	0.00E+00	1.83E-07	3.67E-07	1
285	17.693	18.039	2	5.35E-08	0.00E+00	7.49E-08	5.35E-08	0.00E+00	7.49E-08	1.50E-07	1
426	17.792	17.981	3	2.16E-07	0.00E+00	3.02E-07	2.16E-07	0.00E+00	3.02E-07	6.05E-07	1
524	18.297	18.033	2	1.47E-02	6.47E-01	2.06E-02	1.47E-02	6.47E-01	4.55E+00	4.57E+00	3
525	18.296	17.953	2	1.88E-02	9.71E-01	2.63E-02	1.88E-02	9.71E-01	6.82E+00	6.85E+00	4
526	18.347	17.998	2	1.95E-02	1.28E+00	2.73E-02	1.95E-02	1.28E+00	8.99E+00	9.01E+00	4
658	18.138	17.962	7	6.75E-03	2.00E-01	9.45E-03	6.75E-03	2.00E-01	1.41E+00	1.42E+00	2
675	18.397	17.990	3	2.31E-02	1.97E+00	3.23E-02	2.31E-02	1.97E+00	1.38E+01	1.39E+01	4
734	18.172	18.053	4	6.84E-03	9.46E-02	9.58E-03	6.84E-03	9.46E-02	6.72E-01	6.81E-01	2
768	18.003	14.798	7	1.06E-01	3.66E+00	1.48E-01	1.06E-01	3.66E+00	2.58E+01	2.59E+01	5
770	18.800	19.002	2	8.85E-03	3.10E-01	1.24E-02	8.85E-03	3.10E-01	2.18E+00	2.19E+00	2
771	18.674	18.999	7	1.15E-02	2.52E-04	1.61E-02	1.15E-02	2.52E-04	1.79E-02	3.40E-02	1
772	18.736	18.998	8	1.05E-02	1.81E-03	1.47E-02	1.05E-02	1.81E-03	2.74E-02	4.21E-02	1

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

773	18.870	19.061	6	1.46E-02	6.70E-01	2.04E-02	1.46E-02	6.70E-01	4.71E+00	4.73E+00	3
774	17.506	14.808	6	7.83E-03	7.08E-01	1.10E-02	7.83E-03	7.08E-01	4.97E+00	4.98E+00	3
775	18.651	19.059	8	4.87E-03	0.00E+00	6.82E-03	4.87E-03	0.00E+00	6.82E-03	1.36E-02	1
776	17.999	14.606	4	1.01E-01	3.69E+00	1.41E-01	1.01E-01	3.69E+00	2.60E+01	2.61E+01	5
777	18.950	19.002	4	7.11E-02	3.89E+00	9.95E-02	7.11E-02	3.89E+00	2.73E+01	2.74E+01	5
778	18.793	15.558	1	1.97E-01	2.25E+01	2.76E-01	1.97E-01	2.25E+01	1.58E+02	1.58E+02	8
780	18.842	15.405	3	1.83E-01	2.35E+01	2.56E-01	1.83E-01	2.35E+01	1.65E+02	1.65E+02	8
782	18.636	15.483	5	1.91E-01	1.66E+01	2.67E-01	1.91E-01	1.66E+01	1.16E+02	1.17E+02	8
783	18.794	15.483	6	1.91E-01	2.22E+01	2.67E-01	1.91E-01	2.22E+01	1.56E+02	1.56E+02	8
784	18.591	15.481	2	1.88E-01	1.53E+01	2.63E-01	1.88E-01	1.53E+01	1.07E+02	1.08E+02	8
785	18.685	15.488	5	1.92E-01	1.83E+01	2.69E-01	1.92E-01	1.83E+01	1.28E+02	1.29E+02	8
786	18.543	15.483	4	1.84E-01	1.39E+01	2.58E-01	1.84E-01	1.39E+01	9.76E+01	9.78E+01	8
787	18.902	15.479	2	2.15E-01	2.62E+01	3.01E-01	2.15E-01	2.62E+01	1.84E+02	1.84E+02	8
788	18.949	15.474	3	2.36E-01	2.80E+01	3.30E-01	2.36E-01	2.80E+01	1.96E+02	1.97E+02	8
789	18.949	15.405	6	2.31E-01	2.75E+01	3.23E-01	2.31E-01	2.75E+01	1.93E+02	1.93E+02	8
790	18.844	15.477	2	1.90E-01	2.40E+01	2.66E-01	1.90E-01	2.40E+01	1.68E+02	1.69E+02	8
791	18.996	15.472	3	2.58E-01	2.98E+01	3.61E-01	2.58E-01	2.98E+01	2.09E+02	2.09E+02	8
792	18.997	15.406	5	2.54E-01	2.93E+01	3.56E-01	2.54E-01	2.93E+01	2.05E+02	2.06E+02	8
793	18.439	15.487	3	1.75E-01	1.09E+01	2.45E-01	1.75E-01	1.09E+01	7.65E+01	7.68E+01	8
794	18.489	15.483	3	1.80E-01	1.23E+01	2.52E-01	1.80E-01	1.23E+01	8.64E+01	8.66E+01	8
795	18.739	15.483	5	1.92E-01	2.02E+01	2.69E-01	1.92E-01	2.02E+01	1.42E+02	1.42E+02	8
798	18.846	15.549	4	1.97E-01	2.44E+01	2.76E-01	1.97E-01	2.44E+01	1.71E+02	1.71E+02	8
799	18.400	15.488	4	1.70E-01	1.01E+01	2.38E-01	1.70E-01	1.01E+01	7.09E+01	7.12E+01	7
804	18.624	18.999	3	1.05E-02	0.00E+00	1.47E-02	1.05E-02	0.00E+00	1.47E-02	2.94E-02	1
805	18.490	15.405	3	1.76E-01	1.23E+01	2.46E-01	1.76E-01	1.23E+01	8.63E+01	8.66E+01	8
814	18.952	19.064	6	6.08E-02	2.47E+00	8.51E-02	6.08E-02	2.47E+00	1.74E+01	1.75E+01	5
815	18.545	15.420	4	1.81E-01	1.39E+01	2.53E-01	1.81E-01	1.39E+01	9.76E+01	9.78E+01	8
816	18.738	15.415	5	1.88E-01	1.99E+01	2.63E-01	1.88E-01	1.99E+01	1.40E+02	1.40E+02	8
831	18.999	19.004	5	1.02E-01	1.01E+01	1.43E-01	1.02E-01	1.01E+01	7.08E+01	7.10E+01	7
832	18.739	19.068	4	3.28E-03	0.00E+00	4.59E-03	3.28E-03	0.00E+00	4.59E-03	9.18E-03	1
846	17.548	14.720	33	1.27E-02	8.88E-01	1.78E-02	1.27E-02	8.88E-01	6.23E+00	6.25E+00	4
847	17.452	14.713	7	3.78E-03	5.50E-01	5.29E-03	3.78E-03	5.50E-01	3.86E+00	3.86E+00	3
848	17.619	14.598	28	2.10E-02	1.18E+00	2.94E-02	2.10E-02	1.18E+00	8.29E+00	8.32E+00	4
849	17.847	14.523	14	7.17E-02	2.29E+00	1.00E-01	7.17E-02	2.29E+00	1.61E+01	1.62E+01	5
850	17.645	14.519	5	2.47E-02	1.30E+00	3.46E-02	2.47E-02	1.30E+00	9.13E+00	9.17E+00	4
851	17.522	14.526	16	1.24E-02	8.69E-01	1.74E-02	1.24E-02	8.69E-01	6.10E+00	6.12E+00	4
856	17.750	14.796	9	4.43E-02	1.73E+00	6.20E-02	4.43E-02	1.73E+00	1.22E+01	1.22E+01	4
858	18.573	19.060	12	2.97E-03	0.00E+00	4.16E-03	2.97E-03	0.00E+00	4.16E-03	8.32E-03	1
859	18.800	19.065	3	3.19E-03	1.11E-01	4.47E-03	3.19E-03	1.11E-01	7.81E-01	7.86E-01	2
860	18.868	18.997	4	1.98E-02	1.29E+00	2.77E-02	1.98E-02	1.29E+00	9.06E+00	9.09E+00	4
861	18.943	15.543	6	2.38E-01	2.83E+01	3.33E-01	2.38E-01	2.83E+01	1.98E+02	1.99E+02	8
862	18.900	15.398	2	2.06E-01	2.56E+01	2.88E-01	2.06E-01	2.56E+01	1.79E+02	1.80E+02	8
864	17.794	14.710	24	5.60E-02	1.99E+00	7.84E-02	5.60E-02	1.99E+00	1.40E+01	1.41E+01	4
865	18.790	15.396	2	1.85E-01	2.17E+01	2.59E-01	1.85E-01	2.17E+01	1.52E+02	1.52E+02	8
868	17.645	14.717	10	2.18E-02	1.23E+00	3.05E-02	2.18E-02	1.23E+00	8.64E+00	8.67E+00	4
870	18.683	15.404	4	1.89E-01	1.80E+01	2.65E-01	1.89E-01	1.80E+01	1.26E+02	1.27E+02	8
872	17.453	14.800	1	3.06E-03	5.29E-01	4.28E-03	3.06E-03	5.29E-01	3.71E+00	3.71E+00	3
873	18.898	15.544	4	2.18E-01	2.65E+01	3.05E-01	2.18E-01	2.65E+01	1.86E+02	1.86E+02	8
882	19.020	13.167	2	1.59E-01	1.52E+01	2.23E-01	1.59E-01	1.52E+01	1.07E+02	1.07E+02	8
883	17.944	14.715	6	9.06E-02	3.15E+00	1.27E-01	9.06E-02	3.15E+00	2.22E+01	2.23E+01	5
885	17.712	14.726	1	3.66E-02	1.56E+00	5.12E-02	3.66E-02	1.56E+00	1.10E+01	1.10E+01	4
887	18.486	15.329	3	1.72E-01	1.21E+01	2.41E-01	1.72E-01	1.21E+01	8.49E+01	8.52E+01	8
889	18.997	15.547	2	2.62E-01	3.05E+01	3.67E-01	2.62E-01	3.05E+01	2.14E+02	2.14E+02	8
890	18.440	15.406	2	1.72E-01	1.09E+01	2.41E-01	1.72E-01	1.09E+01	7.65E+01	7.68E+01	8
904	19.152	16.827	6	4.07E-01	5.61E+01	5.70E-01	4.07E-01	5.61E+01	3.93E+02	3.94E+02	8
906	19.286	16.899	3	4.79E-01	6.84E+01	6.71E-01	4.79E-01	6.84E+01	4.79E+02	4.80E+02	8
907	19.194	16.828	6	4.33E-01	5.95E+01	6.06E-01	4.33E-01	5.95E+01	4.17E+02	4.18E+02	8
908	19.152	16.901	2	4.06E-01	5.74E+01	5.68E-01	4.06E-01	5.74E+01	4.02E+02	4.03E+02	8
909	18.885	16.902	2	2.64E-01	3.49E+01	3.70E-01	2.64E-01	3.49E+01	2.45E+02	2.45E+02	8
910	19.239	16.901	3	4.66E-01	6.49E+01	6.52E-01	4.66E-01	6.49E+01	4.55E+02	4.56E+02	8
911	17.490	16.998	2	1.86E-07	0.00E+00	2.60E-07	1.86E-07	0.00E+00	2.60E-07	5.21E-07	1
912	18.695	16.902	2	2.00E-01	2.15E+01	2.80E-01	2.00E-01	2.15E+01	1.51E+02	1.51E+02	8
913	17.539	17.001	2	4.11E-07	0.00E+00	5.75E-07	4.11E-07	0.00E+00	5.75E-07	1.15E-06	1
914	18.004	17.005	3	2.19E-02	1.13E+00	3.07E-02	2.19E-02	1.13E+00	7.94E+00	7.97E+00	4
915	17.953	16.928	3	1.75E-02	9.76E-01	2.45E-02	1.75E-02	9.76E-01	6.86E+00	6.88E+00	4
916	18.006	16.927	3	2.57E-02	1.30E+00	3.60E-02	2.57E-02	1.30E+00	9.14E+00	9.17E+00	4
917	18.056	16.923	3	3.34E-02	1.66E+00	4.68E-02	3.34E-02	1.66E+00	1.17E+01	1.17E+01	4
918	18.099	16.922	4	3.84E-02	2.20E+00	5.38E-02	3.84E-02	2.20E+00	1.55E+01	1.55E+01	5
919	17.894	16.929	2	8.39E-03	6.11E-01	1.17E-02	8.39E-03	6.11E-01	4.29E+00	4.30E+00	3
927	18.594	15.407	4	1.85E-01	1.53E+01	2.59E-01	1.85E-01	1.53E+01	1.07E+02	1.08E+02	8
933	18.637	15.415	4	1.89E-01	1.65E+01	2.65E-01	1.89E-01	1.65E+01	1.16E+02	1.16E+02	8
934	17.893	16.999	2	7.23E-03	4.65E-01	1.01E-02	7.23E-03	4.65E-01	3.27E+00	3.28E+00	3
935	18.196	17.004	3	4.63E-02	3.19E+00	6.48E-02	4.63E-02	3.19E+00	2.24E+01	2.25E+01	5

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

936	17.843	17.001	2	1.38E-03	1.90E-01	1.93E-03	1.38E-03	1.90E-01	1.33E+00	1.33E+00	2
943	19.301	16.815	16	4.73E-01	6.73E+01	6.62E-01	4.73E-01	6.73E+01	4.72E+02	4.72E+02	8
949	18.996	16.900	2	3.12E-01	4.42E+01	4.37E-01	3.12E-01	4.42E+01	3.10E+02	3.10E+02	8
950	18.521	16.997	12	1.05E-01	1.21E+01	1.47E-01	1.05E-01	1.21E+01	8.48E+01	8.50E+01	8
951	18.949	16.902	2	2.92E-01	4.03E+01	4.09E-01	2.92E-01	4.03E+01	2.83E+02	2.83E+02	8
952	18.150	17.000	3	4.07E-02	2.64E+00	5.70E-02	4.07E-02	2.64E+00	1.85E+01	1.86E+01	5
953	18.055	17.000	3	2.89E-02	1.49E+00	4.05E-02	2.89E-02	1.49E+00	1.05E+01	1.05E+01	4
954	18.098	16.998	3	3.44E-02	2.01E+00	4.82E-02	3.44E-02	2.01E+00	1.41E+01	1.42E+01	4
955	18.498	16.900	4	8.88E-02	1.14E+01	1.24E-01	8.88E-02	1.14E+01	7.99E+01	8.00E+01	8
956	17.792	17.000	2	1.02E-03	1.41E-01	1.43E-03	1.02E-03	1.41E-01	9.88E-01	9.90E-01	2
957	17.746	16.997	2	6.95E-04	9.84E-02	9.73E-04	6.95E-04	9.84E-02	6.90E-01	6.91E-01	2
958	17.696	16.997	2	3.33E-04	4.71E-02	4.66E-04	3.33E-04	4.71E-02	3.30E-01	3.31E-01	2
959	18.643	16.902	9	1.81E-01	1.81E+01	2.53E-01	1.81E-01	1.81E+01	1.27E+02	1.27E+02	8
960	18.452	16.901	4	5.97E-02	9.29E+00	8.36E-02	5.97E-02	9.29E+00	6.51E+01	6.52E+01	7
961	18.400	16.901	1	5.80E-02	7.94E+00	8.12E-02	5.80E-02	7.94E+00	5.57E+01	5.57E+01	7
962	18.350	16.901	1	5.75E-02	6.68E+00	8.05E-02	5.75E-02	6.68E+00	4.68E+01	4.69E+01	6
963	18.299	16.903	1	5.70E-02	5.39E+00	7.98E-02	5.70E-02	5.39E+00	3.78E+01	3.79E+01	6
964	18.250	16.903	1	5.64E-02	4.16E+00	7.90E-02	5.64E-02	4.16E+00	2.92E+01	2.93E+01	5
965	18.196	16.903	1	5.03E-02	3.48E+00	7.04E-02	5.03E-02	3.48E+00	2.44E+01	2.45E+01	5
966	18.145	16.907	1	4.44E-02	2.82E+00	6.22E-02	4.44E-02	2.82E+00	1.98E+01	1.99E+01	5
967	17.841	16.917	1	1.60E-03	3.48E-01	2.24E-03	1.60E-03	3.48E-01	2.44E+00	2.44E+00	2
976	19.263	16.995	6	4.79E-01	6.90E+01	6.71E-01	4.79E-01	6.90E+01	4.84E+02	4.84E+02	8
978	19.336	16.911	2	4.89E-01	7.23E+01	6.85E-01	4.89E-01	7.23E+01	5.07E+02	5.07E+02	8
980	19.390	16.905	2	4.97E-01	7.61E+01	6.96E-01	4.97E-01	7.61E+01	5.33E+02	5.34E+02	8
981	18.972	16.996	6	2.94E-01	4.31E+01	4.12E-01	2.94E-01	4.31E+01	3.02E+02	3.03E+02	8
984	18.538	16.909	2	1.14E-01	1.32E+01	1.60E-01	1.14E-01	1.32E+01	9.26E+01	9.27E+01	8
985	18.587	16.905	2	1.45E-01	1.55E+01	2.03E-01	1.45E-01	1.55E+01	1.09E+02	1.09E+02	8
986	17.597	17.004	1	6.74E-07	0.00E+00	9.44E-07	6.74E-07	0.00E+00	9.44E-07	1.89E-06	1
988	17.649	17.006	2	9.09E-07	0.00E+00	1.27E-06	9.09E-07	0.00E+00	1.27E-06	2.55E-06	1
992	18.792	16.910	6	2.30E-01	2.81E+01	3.22E-01	2.30E-01	2.81E+01	1.97E+02	1.97E+02	8
993	19.192	16.912	3	4.33E-01	6.11E+01	6.06E-01	4.33E-01	6.11E+01	4.28E+02	4.29E+02	8
994	19.043	16.912	8	3.32E-01	4.83E+01	4.65E-01	3.32E-01	4.83E+01	3.39E+02	3.39E+02	8
996	19.096	16.911	7	3.67E-01	5.28E+01	5.14E-01	3.67E-01	5.28E+01	3.70E+02	3.71E+02	8
997	17.947	17.000	2	1.45E-02	7.94E-01	2.03E-02	1.45E-02	7.94E-01	5.58E+00	5.60E+00	3

Case 2: Protected 2 rounds at aimpoint (17.95, 15.25)

868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E+01	2.63E+02	2.63E+02	8
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E+01	1.43E+02	1.43E+02	8
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E+00	5.42E+01	5.42E+01	7
846	17.548	14.720	33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E+00	2.18E+01	2.18E+01	5
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E+00	1.85E+01	1.85E+01	5
774	17.506	14.808	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E+00	1.69E+01	1.69E+01	5
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E+00	8.05E+00	8.05E+00	4
872	17.453	14.800	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-01	9.03E-01	9.03E-01	2
847	17.452	14.713	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-02	4.05E-01	4.05E-01	2

VX 500kg TBM
Heavy Attack
Height of Release: 800m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 4 rounds at aimpoint (18.30, 20.00)											
38	18.902	18.161	2	7.34E-05	0.00E+00	1.03E-04	7.34E-05	0.00E+00	1.03E-04	2.06E-04	1
40	18.900	18.232	2	5.52E-05	0.00E+00	7.73E-05	5.52E-05	0.00E+00	7.73E-05	1.55E-04	1
42	18.948	18.195	2	4.94E-05	0.00E+00	6.92E-05	4.94E-05	0.00E+00	6.92E-05	1.38E-04	1
147	18.748	18.163	7	1.66E-01	3.44E-01	2.32E-01	1.66E-01	3.44E-01	2.64E+00	2.87E+00	2
154	18.999	18.190	3	3.35E-05	0.00E+00	4.69E-05	3.35E-05	0.00E+00	4.69E-05	9.38E-05	1
220	18.777	18.253	4	9.03E-02	0.00E+00	1.26E-01	9.03E-02	0.00E+00	1.26E-01	2.53E-01	2
282	17.696	17.960	2	1.09E-04	0.00E+00	1.53E-04	1.09E-04	0.00E+00	1.53E-04	3.05E-04	1
284	17.741	17.997	2	6.13E-02	0.00E+00	8.58E-02	6.13E-02	0.00E+00	8.58E-02	1.72E-01	1
285	17.693	18.039	2	9.32E-05	0.00E+00	1.30E-04	9.32E-05	0.00E+00	1.30E-04	2.61E-04	1
403	17.533	17.964	7	1.83E-05	0.00E+00	2.56E-05	1.83E-05	0.00E+00	2.56E-05	5.12E-05	1
426	17.792	17.981	3	1.42E-01	0.00E+00	1.99E-01	1.42E-01	0.00E+00	1.99E-01	3.98E-01	2
479	17.571	18.054	4	3.33E-05	0.00E+00	4.66E-05	3.33E-05	0.00E+00	4.66E-05	9.32E-05	1
524	18.297	18.033	2	5.14E-02	0.00E+00	7.20E-02	5.14E-02	0.00E+00	7.20E-02	1.44E-01	1
525	18.296	17.953	2	6.43E-02	1.50E-01	9.00E-02	6.43E-02	1.50E-01	1.14E+00	1.23E+00	2
526	18.347	17.998	2	2.40E-01	1.46E+01	3.36E-01	2.40E-01	1.46E+01	1.03E+02	1.03E+02	8
658	18.138	17.962	7	3.46E-01	8.11E+00	4.84E-01	3.46E-01	8.11E+00	5.73E+01	5.77E+01	7
675	18.397	17.990	3	4.47E-01	1.07E+02	6.26E-01	4.47E-01	1.07E+02	7.50E+02	7.50E+02	8
734	18.172	18.053	4	2.31E-01	7.37E-01	3.23E-01	2.31E-01	7.37E-01	5.48E+00	5.81E+00	3

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

761	17.998	18.471	4	4.86E-02	1.25E+02	6.80E-02	4.86E-02	1.25E+02	8.75E+02	8.75E+02	8
767	17.905	18.470	4	6.07E-02	3.90E+00	8.50E-02	6.07E-02	3.90E+00	2.74E+01	2.75E+01	5
768	18.003	14.798	7	1.76E+00	8.84E+01	2.46E+00	1.76E+00	8.84E+01	6.21E+02	6.24E+02	8
770	18.800	19.002	2	3.64E-03	0.00E+00	5.10E-03	3.64E-03	0.00E+00	5.10E-03	1.02E-02	1
771	18.674	18.999	7	1.34E-02	0.00E+00	1.88E-02	1.34E-02	0.00E+00	1.88E-02	3.75E-02	1
772	18.736	18.998	8	6.09E-03	0.00E+00	8.53E-03	6.09E-03	0.00E+00	8.53E-03	1.71E-02	1
773	18.870	19.061	6	7.68E-04	0.00E+00	1.08E-03	7.68E-04	0.00E+00	1.08E-03	2.15E-03	1
774	17.506	14.808	6	8.20E-03	5.84E-02	1.15E-02	8.20E-03	5.84E-02	4.20E-01	4.32E-01	2
775	18.651	19.059	8	1.31E-02	0.00E+00	1.83E-02	1.31E-02	0.00E+00	1.83E-02	3.67E-02	1
776	17.999	14.606	4	1.76E+00	8.08E+01	2.46E+00	1.76E+00	8.08E+01	5.68E+02	5.71E+02	8
777	18.950	19.002	4	1.91E-06	0.00E+00	2.67E-06	1.91E-06	0.00E+00	2.67E-06	5.35E-06	1
778	18.793	15.558	1	1.63E+00	5.20E+01	2.28E+00	1.63E+00	5.20E+01	3.66E+02	3.69E+02	8
780	18.842	15.405	3	1.02E+00	2.74E+01	1.43E+00	1.02E+00	2.74E+01	1.93E+02	1.95E+02	8
782	18.636	15.483	5	3.61E+00	2.05E+02	5.05E+00	3.61E+00	2.05E+02	1.44E+03	1.45E+03	8
783	18.794	15.483	6	1.64E+00	5.28E+01	2.30E+00	1.64E+00	5.28E+01	3.72E+02	3.74E+02	8
784	18.591	15.481	2	4.09E+00	2.36E+02	5.73E+00	4.09E+00	2.36E+02	1.66E+03	1.66E+03	8
785	18.685	15.488	5	3.08E+00	1.57E+02	4.31E+00	3.08E+00	1.57E+02	1.10E+03	1.11E+03	8
786	18.543	15.483	4	4.61E+00	2.52E+02	6.45E+00	4.61E+00	2.52E+02	1.77E+03	1.78E+03	8
787	18.902	15.479	2	2.20E-01	8.02E+00	3.08E-01	2.20E-01	8.02E+00	5.64E+01	5.68E+01	7
788	18.949	15.474	3	1.69E-01	2.54E+00	2.37E-01	1.69E-01	2.54E+00	1.80E+01	1.83E+01	5
789	18.949	15.405	6	1.81E-01	2.84E+00	2.53E-01	1.81E-01	2.84E+00	2.01E+01	2.04E+01	5
790	18.844	15.477	2	9.74E-01	2.51E+01	1.36E+00	9.74E-01	2.51E+01	1.77E+02	1.78E+02	8
791	18.996	15.472	3	1.16E-01	5.86E-01	1.62E-01	1.16E-01	5.86E-01	4.26E+00	4.43E+00	3
792	18.997	15.406	5	1.23E-01	7.17E-01	1.72E-01	1.23E-01	7.17E-01	5.19E+00	5.36E+00	3
793	18.439	15.487	3	4.14E+00	2.22E+02	5.80E+00	4.14E+00	2.22E+02	1.56E+03	1.57E+03	8
794	18.489	15.483	3	4.90E+00	2.46E+02	6.86E+00	4.90E+00	2.46E+02	1.73E+03	1.74E+03	8
795	18.739	15.483	5	2.39E+00	1.00E+02	3.35E+00	2.39E+00	1.00E+02	7.03E+02	7.07E+02	8
798	18.846	15.549	4	9.24E-01	2.28E+01	1.29E+00	9.24E-01	2.28E+01	1.61E+02	1.62E+02	8
799	18.400	15.488	4	3.55E+00	1.93E+02	4.97E+00	3.55E+00	1.93E+02	1.36E+03	1.36E+03	8
804	18.624	18.999	3	2.48E-02	0.00E+00	3.47E-02	2.48E-02	0.00E+00	3.47E-02	6.94E-02	1
805	18.490	15.405	3	4.97E+00	2.45E+02	6.96E+00	4.97E+00	2.45E+02	1.72E+03	1.73E+03	8
814	18.952	19.064	6	1.30E-06	0.00E+00	1.82E-06	1.30E-06	0.00E+00	1.82E-06	3.64E-06	1
815	18.545	15.420	4	4.63E+00	2.50E+02	6.48E+00	4.63E+00	2.50E+02	1.76E+03	1.76E+03	8
816	18.738	15.415	5	2.44E+00	1.02E+02	3.42E+00	2.44E+00	1.02E+02	7.17E+02	7.21E+02	8
823	17.948	18.476	2	5.47E-02	2.98E+01	7.66E-02	5.47E-02	2.98E+01	2.09E+02	2.09E+02	8
831	18.999	19.004	5	1.27E-06	0.00E+00	1.78E-06	1.27E-06	0.00E+00	1.78E-06	3.56E-06	1
832	18.739	19.068	4	3.91E-03	0.00E+00	5.47E-03	3.91E-03	0.00E+00	5.47E-03	1.09E-02	1
846	17.548	14.720	33	6.96E-02	6.31E-01	9.74E-02	6.96E-02	6.31E-01	4.51E+00	4.61E+00	3
847	17.452	14.713	7	8.12E-05	0.00E+00	1.14E-04	8.12E-05	0.00E+00	1.14E-04	2.27E-04	1
848	17.619	14.598	28	1.88E-01	3.47E+00	2.63E-01	1.88E-01	3.47E+00	2.46E+01	2.48E+01	5
849	17.847	14.523	14	1.28E+00	4.67E+01	1.79E+00	1.28E+00	4.67E+01	3.29E+02	3.30E+02	8
850	17.645	14.519	5	2.42E-01	5.80E+00	3.39E-01	2.42E-01	5.80E+00	4.09E+01	4.13E+01	6
851	17.522	14.526	16	3.67E-02	4.36E-01	5.14E-02	3.67E-02	4.36E-01	3.10E+00	3.15E+00	3
852	17.775	18.473	40	2.29E-02	0.00E+00	3.21E-02	2.29E-02	0.00E+00	3.21E-02	6.41E-02	1
854	17.942	18.391	2	6.70E-02	3.36E+01	9.38E-02	6.70E-02	3.36E+01	2.35E+02	2.35E+02	8
855	17.799	18.399	5	3.36E-02	0.00E+00	4.70E-02	3.36E-02	0.00E+00	4.70E-02	9.41E-02	1
856	17.750	14.796	9	6.12E-01	1.94E+01	8.57E-01	6.12E-01	1.94E+01	1.37E+02	1.38E+02	8
858	18.573	19.060	12	2.54E-02	0.00E+00	3.56E-02	2.54E-02	0.00E+00	3.56E-02	7.11E-02	1
859	18.800	19.065	3	2.48E-03	0.00E+00	3.47E-03	2.48E-03	0.00E+00	3.47E-03	6.94E-03	1
860	18.868	18.997	4	1.20E-03	0.00E+00	1.68E-03	1.20E-03	0.00E+00	1.68E-03	3.36E-03	1
861	18.943	15.543	6	1.63E-01	2.90E+00	2.28E-01	1.63E-01	2.90E+00	2.05E+01	2.08E+01	5
862	18.900	15.398	2	2.41E-01	9.12E+00	3.37E-01	2.41E-01	9.12E+00	6.42E+01	6.45E+01	7
864	17.794	14.710	24	9.19E-01	3.06E+01	1.29E+00	9.19E-01	3.06E+01	2.15E+02	2.17E+02	8
865	18.790	15.396	2	1.73E+00	5.78E+01	2.42E+00	1.73E+00	5.78E+01	4.07E+02	4.09E+02	8
868	17.645	14.717	10	2.10E-01	4.81E+00	2.94E-01	2.10E-01	4.81E+00	3.40E+01	3.43E+01	6
870	18.683	15.404	4	3.15E+00	1.59E+02	4.41E+00	3.15E+00	1.59E+02	1.12E+03	1.12E+03	8
872	17.453	14.800	1	7.56E-05	0.00E+00	1.06E-04	7.56E-05	0.00E+00	1.06E-04	2.12E-04	1
873	18.898	15.544	4	2.34E-01	8.08E+00	3.28E-01	2.34E-01	8.08E+00	5.69E+01	5.72E+01	7
882	19.020	13.167	2	3.71E-01	7.39E+00	5.19E-01	3.71E-01	7.39E+00	5.22E+01	5.28E+01	7
883	17.944	14.715	6	1.69E+00	7.60E+01	2.37E+00	1.69E+00	7.60E+01	5.34E+02	5.37E+02	8
885	17.712	14.726	1	3.69E-01	1.22E+01	5.17E-01	3.69E-01	1.22E+01	8.59E+01	8.64E+01	8
886	17.630	18.485	1	1.62E-05	0.00E+00	2.27E-05	1.62E-05	0.00E+00	2.27E-05	4.54E-05	1
887	18.486	15.329	3	4.96E+00	2.42E+02	6.94E+00	4.96E+00	2.42E+02	1.70E+03	1.71E+03	8
889	18.997	15.547	2	1.06E-01	3.51E-01	1.48E-01	1.06E-01	3.51E-01	2.61E+00	2.75E+00	2
890	18.440	15.406	2	4.21E+00	2.22E+02	5.89E+00	4.21E+00	2.22E+02	1.56E+03	1.57E+03	8
909	18.885	16.902	2	1.28E-01	3.79E-01	1.79E-01	1.28E-01	3.79E-01	2.83E+00	3.01E+00	3
912	18.695	16.902	2	1.74E+00	1.15E+02	2.44E+00	1.74E+00	1.15E+02	8.07E+02	8.10E+02	8
913	17.539	17.001	2	7.13E-05	0.00E+00	9.98E-05	7.13E-05	0.00E+00	9.98E-05	2.00E-04	1
914	18.004	17.005	3	1.12E+00	1.43E+02	1.57E+00	1.12E+00	1.43E+02	1.00E+03	1.00E+03	8
915	17.953	16.928	3	1.14E+00	1.16E+02	1.60E+00	1.14E+00	1.16E+02	8.14E+02	8.15E+02	8
916	18.006	16.927	3	1.19E+00	1.40E+02	1.67E+00	1.19E+00	1.40E+02	9.82E+02	9.83E+02	8
917	18.056	16.923	3	1.23E+00	1.18E+02	1.72E+00	1.23E+00	1.18E+02	8.28E+02	8.29E+02	8
918	18.099	16.922	4	1.27E+00	7.70E+01	1.78E+00	1.27E+00	7.70E+01	5.41E+02	5.43E+02	8

Table B4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

919	17.894	16.929	2	1.07E+00	5.94E+01	1.50E+00	1.07E+00	5.94E+01	4.17E+02	4.19E+02	8
927	18.594	15.407	4	4.10E+00	2.33E+02	5.74E+00	4.10E+00	2.33E+02	1.64E+03	1.64E+03	8
933	18.637	15.415	4	3.64E+00	2.03E+02	5.10E+00	3.64E+00	2.03E+02	1.43E+03	1.43E+03	8
934	17.893	16.999	2	1.00E+00	5.66E+01	1.40E+00	1.00E+00	5.66E+01	3.98E+02	3.99E+02	8
935	18.196	17.004	3	8.81E-01	1.02E+01	1.23E+00	8.81E-01	1.02E+01	7.26E+01	7.39E+01	7
936	17.843	17.001	2	7.43E-01	2.07E+01	1.04E+00	7.43E-01	2.07E+01	1.46E+02	1.47E+02	8
949	18.996	16.900	2	3.08E-04	0.00E+00	4.31E-04	3.08E-04	0.00E+00	4.31E-04	8.62E-04	1
950	18.521	16.997	12	2.79E+00	2.16E+02	3.91E+00	2.79E+00	2.16E+02	1.52E+03	1.52E+03	8
951	18.949	16.902	2	4.46E-04	0.00E+00	6.24E-04	4.46E-04	0.00E+00	6.24E-04	1.25E-03	1
952	18.150	17.000	3	1.04E+00	3.04E+01	1.46E+00	1.04E+00	3.04E+01	2.14E+02	2.16E+02	8
953	18.055	17.000	3	1.17E+00	1.20E+02	1.64E+00	1.17E+00	1.20E+02	8.42E+02	8.43E+02	8
954	18.098	16.998	3	1.21E+00	7.63E+01	1.69E+00	1.21E+00	7.63E+01	5.36E+02	5.37E+02	8
955	18.498	16.900	4	3.14E+00	2.06E+02	4.40E+00	3.14E+00	2.06E+02	1.45E+03	1.45E+03	8
956	17.792	17.000	2	4.78E-01	5.05E+00	6.69E-01	4.78E-01	5.05E+00	3.60E+01	3.67E+01	6
957	17.746	16.997	2	2.40E-01	7.52E-01	3.36E-01	2.40E-01	7.52E-01	5.60E+00	5.94E+00	3
958	17.696	16.997	2	3.60E-04	0.00E+00	5.04E-04	3.60E-04	0.00E+00	5.04E-04	1.01E-03	1
959	18.643	16.902	9	2.12E+00	2.01E+02	2.97E+00	2.12E+00	2.01E+02	1.41E+03	1.41E+03	8
960	18.452	16.901	4	2.55E+00	1.93E+02	3.57E+00	2.55E+00	1.93E+02	1.35E+03	1.36E+03	8
961	18.400	16.901	1	1.89E+00	1.77E+02	2.65E+00	1.89E+00	1.77E+02	1.24E+03	1.24E+03	8
962	18.350	16.901	1	1.25E+00	1.12E+02	1.75E+00	1.25E+00	1.12E+02	7.86E+02	7.88E+02	8
963	18.299	16.903	1	6.06E-01	3.93E+01	8.48E-01	6.06E-01	3.93E+01	2.76E+02	2.77E+02	8
964	18.250	16.903	1	7.73E-01	9.97E+00	1.08E+00	7.73E-01	9.97E+00	7.09E+01	7.20E+01	7
965	18.196	16.903	1	9.58E-01	1.27E+01	1.34E+00	9.58E-01	1.27E+01	9.02E+01	9.16E+01	8
966	18.145	16.907	1	1.13E+00	3.76E+01	1.58E+00	1.13E+00	3.76E+01	2.65E+02	2.66E+02	8
967	17.841	16.917	1	7.83E-01	2.23E+01	1.10E+00	7.83E-01	2.23E+01	1.57E+02	1.58E+02	8
981	18.972	16.996	6	3.47E-04	0.00E+00	4.86E-04	3.47E-04	0.00E+00	4.86E-04	9.72E-04	1
984	18.538	16.909	2	2.87E+00	2.36E+02	4.02E+00	2.87E+00	2.36E+02	1.66E+03	1.66E+03	8
985	18.587	16.905	2	2.53E+00	2.49E+02	3.54E+00	2.53E+00	2.49E+02	1.75E+03	1.75E+03	8
986	17.597	17.004	1	1.77E-04	0.00E+00	2.48E-04	1.77E-04	0.00E+00	2.48E-04	4.96E-04	1
988	17.649	17.006	2	2.71E-04	0.00E+00	3.79E-04	2.71E-04	0.00E+00	3.79E-04	7.59E-04	1
992	18.792	16.910	6	9.12E-01	1.37E+01	1.28E+00	9.12E-01	1.37E+01	9.72E+01	9.85E+01	8
994	19.043	16.912	8	1.67E-04	0.00E+00	2.34E-04	1.67E-04	0.00E+00	2.34E-04	4.68E-04	1
996	19.096	16.911	7	1.17E-05	0.00E+00	1.64E-05	1.17E-05	0.00E+00	1.64E-05	3.28E-05	1
997	17.947	17.000	2	1.08E+00	1.11E+02	1.51E+00	1.08E+00	1.11E+02	7.79E+02	7.80E+02	8
Case 2: Protected 4 rounds at aimpoint (18.00, 15.65)											
848	17.619	14.598	28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-01	5.44E+00	5.44E+00	3
850	17.645	14.519	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E+00	1.95E+01	1.95E+01	5
856	17.750	14.796	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E+00	1.62E+01	1.62E+01	5
864	17.794	14.710	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-01	5.03E+00	5.03E+00	3
868	17.645	14.717	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-01	5.65E+00	5.65E+00	3
885	17.712	14.726	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E+01	5.43E+02	5.43E+02	8

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Mustard (HD) 152mm Artillery
Light Attack
Height of Release: 15m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)			Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
	Xwind	Upwind					E	R	S
18 rounds at aimpoint (17.55, 14.85)									
774	17.506	14.808	6	2.27E+02	4.08E+02	8.10E+02	6	5	6
846	17.548	14.720	33	1.31E+02	3.13E+02	5.78E+02	5	4	5
848	17.619	14.598	28	3.35E+01	1.83E+02	2.95E+02	2	1	4
850	17.645	14.519	5	6.41E+00	2.18E+01	3.76E+01	2	1	2
851	17.522	14.526	16	1.65E+01	5.48E+01	9.48E+01	2	1	2
868	17.645	14.717	10	2.36E+02	8.86E+01	3.63E+02	6	5	4

Case 2a: Protected (Eye, Respiratory Exposure)

18 rounds at aimpoint (10.75, 19.65)									
288	10.784	19.424	5	1.01E-01	1.12E+02	1.01E-01	1	1	
416	10.830	19.411	4	2.85E-02	5.15E+01	2.85E-02	1	1	
437	10.737	19.413	1	7.33E-02	9.71E+01	7.33E-02	1	1	
483	10.709	19.515	4	6.41E-02	6.77E+01	6.41E-02	1	1	
486	10.713	19.620	4	3.66E-01	7.52E+02	3.66E-01	1	1	

Case 2b: Protected (Skin Exposure)

18 rounds at aimpoint (10.75, 19.65)									
288	10.784	19.424	5	1.13E+00	3.20E+02	4.58E+02			4
416	10.830	19.411	4	4.54E-01	1.47E+02	2.10E+02			3
437	10.737	19.413	1	5.38E-01	2.78E+02	3.98E+02			4
483	10.709	19.515	4	6.23E-01	1.94E+02	2.78E+02			4
486	10.713	19.620	4	4.70E+00	2.15E+03	3.08E+03			7

Mustard (HD) MRLS
Moderate Attack
Height of Release: 15m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Height of Release: 10m		Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
	Xwind	Upwind					E	R	S
240 rounds at aimpoint (17.85, 19.55)									
282	17.696	17.960	2	1.13E+02	0.00E+00	1.13E+02	5	4	3
284	17.741	17.997	2	1.26E+02	0.00E+00	1.26E+02	5	4	3
285	17.693	18.039	2	1.10E+02	0.00E+00	1.10E+02	5	4	3
403	17.533	17.964	7	2.71E+01	0.00E+00	2.71E+01	2	1	2
426	17.792	17.981	3	1.33E+02	0.00E+00	1.33E+02	5	4	3
479	17.571	18.054	4	5.09E+01	0.00E+00	5.09E+01	3	2	2
524	18.297	18.033	2	4.49E-03	0.00E+00	4.49E-03	1	1	1
525	18.296	17.953	2	1.01E-02	0.00E+00	1.01E-02	1	1	1
658	18.138	17.962	7	7.50E+01	0.00E+00	7.50E+01	4	3	2
734	18.172	18.053	4	4.06E+01	0.00E+00	4.06E+01	2	1	2
761	17.998	18.471	4	9.08E+01	3.24E+00	9.54E+01	4	3	2
767	17.905	18.470	4	8.94E+01	6.18E-01	9.03E+01	4	3	2
768	18.003	14.798	7	7.05E+01	0.00E+00	7.05E+01	4	3	2
774	17.506	14.808	6	1.43E+01	0.00E+00	1.43E+01	2	1	1
776	17.999	14.606	4	6.67E+01	0.00E+00	6.67E+01	3	2	2
823	17.948	18.476	2	8.92E+01	1.63E+00	9.15E+01	4	3	2
846	17.548	14.720	33	2.35E+01	0.00E+00	2.35E+01	2	1	1
847	17.452	14.713	7	5.04E+00	0.00E+00	5.04E+00	2	1	1
848	17.619	14.598	28	4.17E+01	0.00E+00	4.17E+01	2	1	2
849	17.847	14.523	14	7.14E+01	0.00E+00	7.14E+01	4	3	2
850	17.645	14.519	5	4.78E+01	0.00E+00	4.78E+01	2	1	2
851	17.522	14.526	16	1.65E+01	0.00E+00	1.65E+01	2	1	1
852	17.775	18.473	40	9.74E+01	2.88E+00	1.02E+02	4	3	3
854	17.942	18.391	2	9.29E+01	2.75E-01	9.33E+01	4	3	2
855	17.799	18.399	5	1.04E+02	6.03E-01	1.05E+02	5	4	3
856	17.750	14.796	9	7.47E+01	0.00E+00	7.47E+01	4	3	2
864	17.794	14.710	24	7.61E+01	0.00E+00	7.61E+01	4	3	2
868	17.645	14.717	10	5.09E+01	0.00E+00	5.09E+01	3	2	2
872	17.453	14.800	1	5.30E+00	0.00E+00	5.30E+00	2	1	1
883	17.944	14.715	6	7.19E+01	0.00E+00	7.19E+01	4	3	2
885	17.712	14.726	1	6.62E+01	0.00E+00	6.62E+01	3	2	2
886	17.630	18.485	1	6.07E+01	1.87E+00	6.34E+01	3	2	2

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

911	17.490	16.998	2	1.17E+01	0.00E+00	1.17E+01	2	1	1
913	17.539	17.001	2	3.19E+01	0.00E+00	3.19E+01	2	1	2
914	18.004	17.005	3	1.14E+02	0.00E+00	1.14E+02	5	4	3
915	17.953	16.928	3	1.09E+02	0.00E+00	1.09E+02	5	4	3
916	18.006	16.927	3	1.14E+02	0.00E+00	1.14E+02	5	4	3
917	18.056	16.923	3	1.12E+02	0.00E+00	1.12E+02	5	4	3
918	18.099	16.922	4	9.58E+01	0.00E+00	9.58E+01	4	3	2
919	17.894	16.929	2	1.18E+02	0.00E+00	1.18E+02	5	4	3
934	17.893	16.999	2	1.19E+02	0.00E+00	1.19E+02	5	4	3
935	18.196	17.004	3	2.57E+01	0.00E+00	2.57E+01	2	1	2
936	17.843	17.001	2	1.30E+02	0.00E+00	1.30E+02	5	4	3
952	18.150	17.000	3	5.88E+01	0.00E+00	5.88E+01	3	2	2
953	18.055	17.000	3	1.14E+02	0.00E+00	1.14E+02	5	4	3
954	18.098	16.998	3	9.68E+01	0.00E+00	9.68E+01	4	3	2
956	17.792	17.000	2	1.29E+02	0.00E+00	1.29E+02	5	4	3
957	17.746	16.997	2	1.20E+02	0.00E+00	1.20E+02	5	4	3
958	17.696	16.997	2	1.05E+02	0.00E+00	1.05E+02	5	4	3
963	18.299	16.903	1	1.55E-01	0.00E+00	1.55E-01	1	1	1
964	18.250	16.903	1	5.09E+00	0.00E+00	5.09E+00	2	1	1
965	18.196	16.903	1	2.66E+01	0.00E+00	2.66E+01	2	1	2
966	18.145	16.907	1	6.25E+01	0.00E+00	6.25E+01	3	2	2
967	17.841	16.917	1	1.30E+02	0.00E+00	1.30E+02	5	4	3
986	17.597	17.004	1	6.28E+01	0.00E+00	6.28E+01	3	2	2
988	17.649	17.006	2	8.69E+01	0.00E+00	8.69E+01	4	3	2
997	17.947	17.000	2	1.09E+02	0.00E+00	1.09E+02	5	4	3

Case 2a: Protected (Eye,
Respiratory Exposure)

240 rounds at aimpoint (17.75, 17.35)									
911	17.490	16.998	2	5.59E-01	1.96E+02	5.59E-01	1	1	
913	17.539	17.001	2	6.27E-01	1.29E+02	6.27E-01	1	1	
914	18.004	17.005	3	8.95E-01	8.95E+01	8.95E-01	1	1	
915	17.953	16.928	3	2.74E+00	5.08E+02	2.74E+00	1	1	
916	18.006	16.927	3	1.80E+00	1.42E+02	1.80E+00	1	1	
917	18.056	16.923	3	1.02E+00	9.85E+01	1.02E+00	1	1	
918	18.099	16.922	4	2.35E-02	2.65E+00	2.35E-02	1	1	
919	17.894	16.929	2	3.51E+00	3.34E+02	3.51E+00	1	1	
934	17.893	16.999	2	2.17E+00	3.23E+02	2.17E+00	1	1	
936	17.843	17.001	2	3.40E+00	3.55E+02	3.40E+00	1	1	
953	18.055	17.000	3	4.55E-01	1.15E+02	4.55E-01	1	1	
954	18.098	16.998	3	2.05E-02	1.40E+01	2.05E-02	1	1	
956	17.792	17.000	2	2.67E+00	2.63E+02	2.67E+00	1	1	
957	17.746	16.997	2	4.79E+00	3.48E+02	4.79E+00	1	1	
958	17.696	16.997	2	5.17E+00	1.95E+02	5.17E+00	2	1	
967	17.841	16.917	1	5.86E+00	2.82E+02	5.86E+00	2	1	
986	17.597	17.004	1	5.06E+00	5.42E+02	5.06E+00	2	1	
988	17.649	17.006	2	2.77E+00	2.76E+02	2.77E+00	1	1	
997	17.947	17.000	2	1.26E+00	2.83E+02	1.26E+00	1	1	

Case 2b: Protected (Skin
Exposure)

240 rounds at aimpoint (17.75, 17.35)									
768	18.003	14.798	7	3.76E+01	0.00E+00	3.76E+01			2
774	17.506	14.808	6	2.79E+01	0.00E+00	2.79E+01			2
776	17.999	14.606	4	1.45E+01	0.00E+00	1.45E+01			1
846	17.548	14.720	33	2.44E+01	0.00E+00	2.44E+01			1
847	17.452	14.713	7	9.76E+00	0.00E+00	9.76E+00			1
848	17.619	14.598	28	1.77E+01	0.00E+00	1.77E+01			1
849	17.847	14.523	14	9.69E+00	0.00E+00	9.69E+00			1
850	17.645	14.519	5	1.19E+01	0.00E+00	1.19E+01			1
851	17.522	14.526	16	5.72E+00	0.00E+00	5.72E+00			1
856	17.750	14.796	9	5.44E+01	0.00E+00	5.44E+01			2
864	17.794	14.710	24	3.50E+01	0.00E+00	3.50E+01			2
868	17.645	14.717	10	3.58E+01	0.00E+00	3.58E+01			2
872	17.453	14.800	1	1.48E+01	0.00E+00	1.48E+01			1
883	17.944	14.715	6	3.40E+01	0.00E+00	3.40E+01			2
885	17.712	14.726	1	4.28E+01	0.00E+00	4.28E+01			2
911	17.490	16.998	2	1.68E+00	5.60E+02	8.02E+02			6
913	17.539	17.001	2	1.85E+00	3.68E+02	5.28E+02			5
914	18.004	17.005	3	2.69E+00	2.56E+02	3.68E+02			4
915	17.953	16.928	3	8.85E+00	1.45E+03	2.08E+03			7
916	18.006	16.927	3	5.31E+00	4.06E+02	5.85E+02			5
917	18.056	16.923	3	3.12E+00	2.82E+02	4.06E+02			4
918	18.099	16.922	4	7.19E-02	7.59E+00	1.09E+01			1

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

919	17.894	16.929	2	1.09E+01	9.56E+02	1.38E+03			6
934	17.893	16.999	2	7.00E+00	9.24E+02	1.33E+03			6
936	17.843	17.001	2	1.03E+01	1.02E+03	1.47E+03			6
953	18.055	17.000	3	1.47E+00	3.30E+02	4.73E+02			4
954	18.098	16.998	3	6.63E-02	4.01E+01	5.74E+01			2
956	17.792	17.000	2	8.22E+00	7.52E+02	1.08E+03			6
957	17.746	16.997	2	1.42E+01	9.96E+02	1.44E+03			6
958	17.696	16.997	2	1.54E+01	5.59E+02	8.14E+02			6
966	18.145	16.907	1	7.53E-06	0.00E+00	7.53E-06			1
967	17.841	16.917	1	1.73E+01	8.08E+02	1.17E+03			6
986	17.597	17.004	1	1.55E+01	1.55E+03	2.23E+03			7
988	17.649	17.006	2	8.49E+00	7.91E+02	1.14E+03			6
997	17.947	17.000	2	4.44E+00	8.11E+02	1.16E+03			6

Mustard (HD) MRLS
Heavy Attack
Height of Release: 15m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (18.25, 20.00)									
38	18.902	18.161	2	1.20E-01	0.00E+00	1.20E-01	1	1	1
40	18.900	18.232	2	5.44E-02	0.00E+00	5.44E-02	1	1	1
42	18.948	18.195	2	2.90E-03	0.00E+00	2.90E-03	1	1	1
147	18.748	18.163	7	1.10E+02	0.00E+00	1.10E+02	5	4	3
220	18.777	18.253	4	7.71E+01	0.00E+00	7.71E+01	4	3	2
282	17.696	17.960	2	4.76E+01	0.00E+00	4.76E+01	2	1	2
284	17.741	17.997	2	9.93E+01	0.00E+00	9.93E+01	4	3	2
285	17.693	18.039	2	4.47E+01	0.00E+00	4.47E+01	2	1	2
426	17.792	17.981	3	1.38E+02	0.00E+00	1.38E+02	5	4	3
479	17.571	18.054	4	1.01E-01	0.00E+00	1.01E-01	1	1	1
524	18.297	18.033	2	2.57E+02	0.00E+00	2.57E+02	6	6	4
525	18.296	17.953	2	2.58E+02	0.00E+00	2.58E+02	6	6	4
526	18.347	17.998	2	2.49E+02	0.00E+00	2.49E+02	6	5	3
658	18.138	17.962	7	2.17E+02	0.00E+00	2.17E+02	6	5	3
675	18.397	17.990	3	2.21E+02	0.00E+00	2.21E+02	6	5	3
734	18.172	18.053	4	2.19E+02	0.00E+00	2.19E+02	6	5	3
761	17.998	18.471	4	2.24E+02	4.44E-02	2.24E+02	6	5	3
767	17.905	18.470	4	1.46E+02	0.00E+00	1.46E+02	5	4	3
768	18.003	14.798	7	1.94E+02	0.00E+00	1.94E+02	6	5	3
770	18.800	19.002	2	4.30E+01	3.81E+00	4.84E+01	2	1	2
771	18.674	18.999	7	2.61E+02	1.87E+02	5.28E+02	6	6	5
772	18.736	18.998	8	1.23E+02	7.08E+01	2.24E+02	5	4	3
774	17.506	14.808	6	3.26E+00	0.00E+00	3.26E+00	1	1	1
775	18.651	19.059	8	3.74E+02	4.20E+02	9.74E+02	6	6	6
776	17.999	14.606	4	1.90E+02	0.00E+00	1.90E+02	6	5	3
778	18.793	15.558	1	6.53E+01	0.00E+00	6.53E+01	3	2	2
780	18.842	15.405	3	3.93E+01	0.00E+00	3.93E+01	2	1	2
782	18.636	15.483	5	1.59E+02	0.00E+00	1.59E+02	6	5	3
783	18.794	15.483	6	6.48E+01	0.00E+00	6.48E+01	3	2	2
784	18.591	15.481	2	1.76E+02	0.00E+00	1.76E+02	6	5	3
785	18.685	15.488	5	1.33E+02	0.00E+00	1.33E+02	5	4	3
786	18.543	15.483	4	1.88E+02	0.00E+00	1.88E+02	6	5	3
787	18.902	15.479	2	1.62E+01	0.00E+00	1.62E+01	2	1	1
788	18.949	15.474	3	6.71E+00	0.00E+00	6.71E+00	2	1	1
789	18.949	15.405	6	6.98E+00	0.00E+00	6.98E+00	2	1	1
790	18.844	15.477	2	3.79E+01	0.00E+00	3.79E+01	2	1	2
791	18.996	15.472	3	1.92E+00	0.00E+00	1.92E+00	1	1	1
792	18.997	15.406	5	1.95E+00	0.00E+00	1.95E+00	1	1	1
793	18.439	15.487	3	2.06E+02	0.00E+00	2.06E+02	6	5	3
794	18.489	15.483	3	1.98E+02	0.00E+00	1.98E+02	6	5	3
795	18.739	15.483	5	9.99E+01	0.00E+00	9.99E+01	4	3	2
798	18.846	15.549	4	3.65E+01	0.00E+00	3.65E+01	2	1	2
799	18.400	15.488	4	2.13E+02	0.00E+00	2.13E+02	6	5	3
804	18.624	18.999	3	2.79E+02	5.84E+02	1.11E+03	6	6	6
805	18.490	15.405	3	1.97E+02	0.00E+00	1.97E+02	6	5	3

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

815	18.545	15.420	4	1.88E+02	0.00E+00	1.88E+02	6	5	3
816	18.738	15.415	5	1.00E+02	0.00E+00	1.00E+02	5	4	3
823	17.948	18.476	2	1.88E+02	0.00E+00	1.88E+02	6	5	3
832	18.739	19.068	4	1.26E+02	1.48E+02	3.37E+02	5	4	4
846	17.548	14.720	33	8.88E+00	0.00E+00	8.88E+00	2	1	1
847	17.452	14.713	7	4.54E-01	0.00E+00	4.54E-01	1	1	1
848	17.619	14.598	28	2.72E+01	0.00E+00	2.72E+01	2	1	2
849	17.847	14.523	14	1.35E+02	0.00E+00	1.35E+02	5	4	3
850	17.645	14.519	5	3.60E+01	0.00E+00	3.60E+01	2	1	2
851	17.522	14.526	16	5.99E+00	0.00E+00	5.99E+00	2	1	1
852	17.775	18.473	40	1.19E+02	0.00E+00	1.19E+02	5	4	3
854	17.942	18.391	2	1.88E+02	0.00E+00	1.88E+02	6	5	3
855	17.799	18.399	5	1.40E+02	0.00E+00	1.40E+02	5	4	3
856	17.750	14.796	9	8.62E+01	0.00E+00	8.62E+01	4	3	2
858	18.573	19.060	12	2.36E+02	1.10E+03	1.81E+03	6	5	7
859	18.800	19.065	3	4.24E+01	1.31E+01	6.11E+01	2	1	2
860	18.868	18.997	4	9.89E-04	0.00E+00	9.89E-04	1	1	1
861	18.943	15.543	6	7.65E+00	0.00E+00	7.65E+00	2	1	1
862	18.900	15.398	2	1.70E+01	0.00E+00	1.70E+01	2	1	1
864	17.794	14.710	24	1.09E+02	0.00E+00	1.09E+02	5	4	3
865	18.790	15.396	2	6.75E+01	0.00E+00	6.75E+01	3	2	2
868	17.645	14.717	10	3.57E+01	0.00E+00	3.57E+01	2	1	2
870	18.683	15.404	4	1.34E+02	0.00E+00	1.34E+02	5	4	3
872	17.453	14.800	1	4.62E-01	0.00E+00	4.62E-01	1	1	1
873	18.898	15.544	4	1.71E+01	0.00E+00	1.71E+01	2	1	1
882	19.020	13.167	2	3.36E+00	0.00E+00	3.36E+00	1	1	1
883	17.944	14.715	6	1.77E+02	0.00E+00	1.77E+02	6	5	3
885	17.712	14.726	1	6.57E+01	0.00E+00	6.57E+01	3	2	2
886	17.630	18.485	1	1.27E+00	0.00E+00	1.27E+00	1	1	1
887	18.486	15.329	3	1.97E+02	0.00E+00	1.97E+02	6	5	3
889	18.997	15.547	2	1.68E+00	0.00E+00	1.68E+00	1	1	1
890	18.440	15.406	2	2.06E+02	0.00E+00	2.06E+02	6	5	3
909	18.885	16.902	2	1.24E+01	0.00E+00	1.24E+01	2	1	1
911	17.490	16.998	2	1.82E-04	0.00E+00	1.82E-04	1	1	1
912	18.695	16.902	2	1.40E+02	0.00E+00	1.40E+02	5	4	3
913	17.539	17.001	2	5.66E-01	0.00E+00	5.66E-01	1	1	1
914	18.004	17.005	3	2.26E+02	0.00E+00	2.26E+02	6	5	3
915	17.953	16.928	3	2.06E+02	0.00E+00	2.06E+02	6	5	3
916	18.006	16.927	3	2.26E+02	0.00E+00	2.26E+02	6	5	3
917	18.056	16.923	3	2.30E+02	0.00E+00	2.30E+02	6	5	3
918	18.099	16.922	4	2.26E+02	0.00E+00	2.26E+02	6	5	3
919	17.894	16.929	2	1.77E+02	0.00E+00	1.77E+02	6	5	3
927	18.594	15.407	4	1.74E+02	0.00E+00	1.74E+02	6	5	3
933	18.637	15.415	4	1.57E+02	0.00E+00	1.57E+02	6	5	3
934	17.893	16.999	2	1.76E+02	0.00E+00	1.76E+02	6	5	3
935	18.196	17.004	3	2.31E+02	0.00E+00	2.31E+02	6	5	3
936	17.843	17.001	2	1.53E+02	0.00E+00	1.53E+02	6	5	3
949	18.996	16.900	2	1.08E-01	0.00E+00	1.08E-01	1	1	1
950	18.521	16.997	12	2.01E+02	0.00E+00	2.01E+02	6	5	3
951	18.949	16.902	2	1.24E+00	0.00E+00	1.24E+00	1	1	1
952	18.150	17.000	3	2.23E+02	0.00E+00	2.23E+02	6	5	3
953	18.055	17.000	3	2.31E+02	0.00E+00	2.31E+02	6	5	3
954	18.098	16.998	3	2.26E+02	0.00E+00	2.26E+02	6	5	3
955	18.498	16.900	4	2.02E+02	0.00E+00	2.02E+02	6	5	3
956	17.792	17.000	2	1.28E+02	0.00E+00	1.28E+02	5	4	3
957	17.746	16.997	2	9.55E+01	0.00E+00	9.55E+01	4	3	2
958	17.696	16.997	2	5.46E+01	0.00E+00	5.46E+01	3	2	2
959	18.643	16.902	9	1.76E+02	0.00E+00	1.76E+02	6	5	3
960	18.452	16.901	4	2.07E+02	0.00E+00	2.07E+02	6	5	3
961	18.400	16.901	1	2.22E+02	0.00E+00	2.22E+02	6	5	3
962	18.350	16.901	1	2.39E+02	0.00E+00	2.39E+02	6	5	3
963	18.299	16.903	1	2.48E+02	0.00E+00	2.48E+02	6	5	3
964	18.250	16.903	1	2.45E+02	0.00E+00	2.45E+02	6	5	3
965	18.196	16.903	1	2.31E+02	0.00E+00	2.31E+02	6	5	3
966	18.145	16.907	1	2.24E+02	0.00E+00	2.24E+02	6	5	3
967	17.841	16.917	1	1.52E+02	0.00E+00	1.52E+02	6	5	3
981	18.972	16.996	6	4.77E-01	0.00E+00	4.77E-01	1	1	1
984	18.538	16.909	2	2.02E+02	0.00E+00	2.02E+02	6	5	3

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Case 2a: Protected (Eye,
Respiratory Exposure)

985	18.587	16.905	2	1.97E+02	0.00E+00	1.97E+02	6	5	3
986	17.597	17.004	1	5.72E+00	0.00E+00	5.72E+00	2	1	1
988	17.649	17.006	2	2.32E+01	0.00E+00	2.32E+01	2	1	1
992	18.792	16.910	6	6.24E+01	0.00E+00	6.24E+01	3	2	2
994	19.043	16.912	8	2.45E-03	0.00E+00	2.45E-03	1	1	1
997	17.947	17.000	2	2.03E+02	0.00E+00	2.03E+02	6	5	3

720 rounds at aimpoint (18.75, 18.10)

904	19.152	16.827	6	6.39E-01	0.00E+00	6.39E-01	1	1	
906	19.286	16.899	3	2.95E-01	8.60E-02	2.95E-01	1	1	
907	19.194	16.828	6	1.17E-01	0.00E+00	1.17E-01	1	1	
908	19.152	16.901	2	9.91E-01	0.00E+00	9.91E-01	1	1	
909	18.885	16.902	2	2.23E-01	4.70E-01	2.23E-01	1	1	
910	19.239	16.901	3	8.33E-01	2.43E-01	8.33E-01	1	1	
912	18.695	16.902	2	3.92E-01	1.45E+01	3.92E-01	1	1	
935	18.196	17.004	3	7.97E-01	0.00E+00	7.97E-01	1	1	
949	18.996	16.900	2	1.99E+00	4.29E-02	1.99E+00	1	1	
950	18.521	16.997	12	1.58E+00	2.28E+00	1.58E+00	1	1	
951	18.949	16.902	2	1.96E-01	5.26E-01	1.96E-01	1	1	
955	18.498	16.900	4	1.89E+00	0.00E+00	1.89E+00	1	1	
959	18.643	16.902	9	1.64E+00	1.16E+01	1.64E+00	1	1	
960	18.452	16.901	4	8.67E-02	0.00E+00	8.67E-02	1	1	
961	18.400	16.901	1	1.86E+00	3.15E-05	1.86E+00	1	1	
962	18.350	16.901	1	9.01E-01	4.30E+00	9.01E-01	1	1	
963	18.299	16.903	1	3.15E-01	2.45E-01	3.15E-01	1	1	
965	18.196	16.903	1	2.30E-02	0.00E+00	2.30E-02	1	1	
976	19.263	16.995	6	7.75E-01	3.20E-01	7.75E-01	1	1	
981	18.972	16.996	6	1.60E+00	1.53E+00	1.60E+00	1	1	
984	18.538	16.909	2	6.37E-01	2.55E+00	6.37E-01	1	1	
985	18.587	16.905	2	2.02E+00	3.53E+01	2.02E+00	1	1	
992	18.792	16.910	6	2.95E+00	8.24E+00	2.95E+00	1	1	
993	19.192	16.912	3	2.40E-01	0.00E+00	2.40E-01	1	1	
994	19.043	16.912	8	1.70E+00	7.45E+00	1.70E+00	1	1	
996	19.096	16.911	7	3.82E+00	1.88E+00	3.82E+00	1	1	

Case 2b: Protected (Skin
Exposure)

720 rounds at aimpoint (18.75, 18.10)

38	18.902	18.161	2	1.20E-01	0.00E+00	1.20E-01			1
147	18.748	18.163	7	8.18E-03	0.00E+00	8.18E-03			1
524	18.297	18.033	2	1.01E-03	0.00E+00	1.01E-03			1
525	18.296	17.953	2	2.18E-03	0.00E+00	2.18E-03			1
526	18.347	17.998	2	8.35E-02	0.00E+00	8.35E-02			1
675	18.397	17.990	3	5.76E-03	1.14E-01	1.69E-01			1
778	18.793	15.558	1	2.26E+01	0.00E+00	2.26E+01			1
780	18.842	15.405	3	1.10E+01	0.00E+00	1.10E+01			1
782	18.636	15.483	5	1.24E+01	0.00E+00	1.24E+01			1
783	18.794	15.483	6	1.87E+01	0.00E+00	1.87E+01			1
784	18.591	15.481	2	1.36E+01	0.00E+00	1.36E+01			1
785	18.685	15.488	5	1.27E+01	0.00E+00	1.27E+01			1
786	18.543	15.483	4	1.39E+01	0.00E+00	1.39E+01			1
787	18.902	15.479	2	8.30E+00	0.00E+00	8.30E+00			1
788	18.949	15.474	3	1.31E+01	0.00E+00	1.31E+01			1
789	18.949	15.405	6	1.12E+01	0.00E+00	1.12E+01			1
790	18.844	15.477	2	1.23E+01	0.00E+00	1.23E+01			1
791	18.996	15.472	3	1.62E+01	0.00E+00	1.62E+01			1
792	18.997	15.406	5	1.38E+01	0.00E+00	1.38E+01			1
793	18.439	15.487	3	1.02E+01	0.00E+00	1.02E+01			1
794	18.489	15.483	3	1.10E+01	0.00E+00	1.10E+01			1
795	18.739	15.483	5	1.58E+01	0.00E+00	1.58E+01			1
798	18.846	15.549	4	1.54E+01	0.00E+00	1.54E+01			1
799	18.400	15.488	4	1.24E+01	0.00E+00	1.24E+01			1
805	18.490	15.405	3	8.02E+00	0.00E+00	8.02E+00			1
815	18.545	15.420	4	1.19E+01	0.00E+00	1.19E+01			1
816	18.738	15.415	5	1.43E+01	0.00E+00	1.43E+01			1
861	18.943	15.543	6	1.50E+01	0.00E+00	1.50E+01			1
862	18.900	15.398	2	7.00E+00	0.00E+00	7.00E+00			1
865	18.790	15.396	2	1.59E+01	0.00E+00	1.59E+01			1
870	18.683	15.404	4	1.12E+01	0.00E+00	1.12E+01			1
873	18.898	15.544	4	1.07E+01	0.00E+00	1.07E+01			1
887	18.486	15.329	3	4.86E+00	0.00E+00	4.86E+00			1
889	18.997	15.547	2	1.87E+01	0.00E+00	1.87E+01			1

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

890	18.440	15.406	2	6.53E+00	0.00E+00	6.53E+00			1
904	19.152	16.827	6	7.87E+01	6.07E+00	8.74E+01			2
906	19.286	16.899	3	3.04E+01	6.60E-01	3.13E+01			2
907	19.194	16.828	6	3.90E+01	2.08E+00	4.20E+01			2
908	19.152	16.901	2	7.61E+01	1.61E+01	9.91E+01			2
909	18.885	16.902	2	7.81E+01	4.67E+01	1.45E+02			3
910	19.239	16.901	3	4.56E+01	3.61E+00	5.08E+01			2
912	18.695	16.902	2	5.90E+01	1.83E+02	3.20E+02			4
927	18.594	15.407	4	1.19E+01	0.00E+00	1.19E+01			1
933	18.637	15.415	4	1.13E+01	0.00E+00	1.13E+01			1
935	18.196	17.004	3	1.87E+01	1.85E+00	2.13E+01			1
943	19.301	16.815	16	2.07E+01	0.00E+00	2.07E+01			1
949	18.996	16.900	2	5.59E+01	1.51E+01	7.75E+01			2
950	18.521	16.997	12	6.46E+01	2.42E+02	4.10E+02			4
951	18.949	16.902	2	4.36E+01	6.05E+01	1.30E+02			3
952	18.150	17.000	3	1.86E-02	0.00E+00	1.86E-02			1
955	18.498	16.900	4	7.35E+01	9.49E+01	2.09E+02			3
959	18.643	16.902	9	6.64E+01	1.32E+02	2.55E+02			4
960	18.452	16.901	4	4.67E+01	3.31E+01	9.40E+01			2
961	18.400	16.901	1	4.42E+01	8.85E+00	5.68E+01			2
962	18.350	16.901	1	5.57E+01	2.61E+01	9.30E+01			2
963	18.299	16.903	1	5.68E+01	1.39E+01	7.67E+01			2
964	18.250	16.903	1	1.72E+01	8.70E-02	1.73E+01			1
965	18.196	16.903	1	2.08E+01	3.57E-02	2.09E+01			1
966	18.145	16.907	1	3.22E-02	0.00E+00	3.22E-02			1
976	19.263	16.995	6	3.98E+01	4.34E+00	4.60E+01			2
978	19.336	16.911	2	6.54E+00	0.00E+00	6.54E+00			1
980	19.390	16.905	2	1.83E-02	0.00E+00	1.83E-02			1
981	18.972	16.996	6	4.87E+01	1.13E+02	2.10E+02			3
984	18.538	16.909	2	7.39E+01	4.01E+01	1.31E+02			3
985	18.587	16.905	2	6.70E+01	1.35E+02	2.60E+02			4
992	18.792	16.910	6	7.33E+01	3.96E+01	1.30E+02			3
993	19.192	16.912	3	3.80E+01	1.10E+01	5.37E+01			2
994	19.043	16.912	8	7.09E+01	9.54E+01	2.07E+02			3
996	19.096	16.911	7	8.02E+01	6.81E+01	1.77E+02			3

Mustard (HD) 250kg Bomb
Light Attack
Height of Release: 70m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (17.60, 15.00)									
774	17.506	14.808	6	8.36E+02	6.08E+03	9.52E+03	6	6	8
846	17.548	14.720	33	6.08E+00	2.58E+01	4.29E+01	2	1	2
847	17.452	14.713	7	6.12E+00	2.63E+01	4.37E+01	2	1	2
849	17.847	14.523	14	5.87E-05	2.35E-01	3.36E-01	1	1	1
850	17.645	14.519	5	0.00E+00	2.21E-02	3.16E-02	1	1	1
851	17.522	14.526	16	1.77E+01	1.23E+02	1.93E+02	2	1	3
856	17.750	14.796	9	1.08E+03	6.75E+03	1.07E+04	6	6	8
864	17.794	14.710	24	1.85E+01	7.69E+01	1.28E+02	2	1	3
872	17.453	14.800	1	3.54E+00	3.02E+01	4.67E+01	1	1	2
885	17.712	14.726	1	3.62E+01	1.53E+02	2.55E+02	2	1	4

Case 2a: Protected (Eye, Respiratory Exposure)

2 rounds at aimpoint (17.65, 14.90)									
774	17.506	14.808	6	5.74E-03	1.24E+01	5.74E-03	1	1	
846	17.548	14.720	33	1.91E+01	2.84E+03	1.91E+01	2	1	
848	17.619	14.598	28	2.78E-05	2.00E-01	2.78E-05	1	1	
849	17.847	14.523	14	4.40E-02	1.28E+01	4.40E-02	1	1	
850	17.645	14.519	5	0.00E+00	4.13E-03	0.00E+00	1	1	
851	17.522	14.526	16	3.58E-01	6.89E+01	3.58E-01	1	1	
856	17.750	14.796	9	1.16E-05	8.84E-04	1.16E-05	1	1	
864	17.794	14.710	24	1.65E+01	2.10E+03	1.65E+01	2	1	

Case 2b: Protected (Skin Exposure)

2 rounds at aimpoint (17.65, 14.90)									
774	17.506	14.808	6	1.28E-01	3.56E+01	5.10E+01			2
846	17.548	14.720	33	1.91E+02	8.14E+03	1.18E+04			8
848	17.619	14.598	28	1.15E-03	5.73E-01	8.20E-01			1

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

849	17.847	14.523	14	1.24E+00	3.67E+01	5.37E+01			2
850	17.645	14.519	5	1.05E-05	1.18E-02	1.69E-02			1
851	17.522	14.526	16	8.14E+00	1.97E+02	2.90E+02			4
856	17.750	14.796	9	2.26E-04	2.53E-03	3.84E-03			1
864	17.794	14.710	24	1.72E+02	6.00E+03	8.74E+03			8

Mustard (HD) 250kg Bomb
Moderate Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category <i>E R S</i>		
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Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

12 rounds at aimpoint (17.65, 15.20)									
768	18.003	14.798	7	1.16E+03	1.22E+03	2.90E+03	6	6	7
774	17.506	14.808	6	1.09E+03	1.31E+03	2.96E+03	6	6	7
776	17.999	14.606	4	1.88E+01	1.30E+02	2.05E+02	2	1	3
846	17.548	14.720	33	2.85E+01	1.66E+02	2.66E+02	2	1	4
847	17.452	14.713	7	2.35E+01	1.43E+02	2.28E+02	2	1	3
848	17.619	14.598	28	1.50E+01	1.10E+02	1.72E+02	2	1	3
849	17.847	14.523	14	5.25E+00	4.57E+01	7.05E+01	2	1	2
850	17.645	14.519	5	5.45E+00	4.73E+01	7.30E+01	2	1	2
851	17.522	14.526	16	6.99E+00	5.90E+01	9.13E+01	2	1	2
856	17.750	14.796	9	2.79E+02	3.37E+02	7.60E+02	6	6	6
864	17.794	14.710	24	3.06E+02	3.91E+02	8.65E+02	6	6	6
868	17.645	14.717	10	2.97E+01	1.77E+02	2.83E+02	2	1	4
872	17.453	14.800	1	2.81E+02	3.61E+02	7.97E+02	6	6	6
883	17.944	14.715	6	2.98E+01	1.76E+02	2.81E+02	2	1	4
885	17.712	14.726	1	2.96E+02	4.07E+02	8.77E+02	6	6	6

Case 2a: Protected (Eye,
Respiratory Exposure)

12 rounds at aimpoint (17.65, 15.05)									
768	18.003	14.798	7	1.91E+01	3.62E+03	1.91E+01	2	1	
774	17.506	14.808	6	1.57E+01	3.59E+03	1.57E+01	2	1	
776	17.999	14.606	4	4.81E+00	2.52E+02	4.81E+00	1	1	
846	17.548	14.720	33	6.80E+00	2.88E+02	6.80E+00	2	1	
847	17.452	14.713	7	5.73E+00	2.68E+02	5.73E+00	2	1	
848	17.619	14.598	28	1.61E+00	1.37E+02	1.61E+00	1	1	
849	17.847	14.523	14	7.25E-01	4.29E+01	7.25E-01	1	1	
850	17.645	14.519	5	7.15E-01	4.26E+01	7.15E-01	1	1	
851	17.522	14.526	16	6.08E-01	6.69E+01	6.08E-01	1	1	
856	17.750	14.796	9	2.16E+01	9.18E+02	2.16E+01	2	1	
864	17.794	14.710	24	1.78E+01	9.08E+02	1.78E+01	2	1	
868	17.645	14.717	10	5.61E+00	2.64E+02	5.61E+00	2	1	
872	17.453	14.800	1	1.98E+01	8.73E+02	1.98E+01	2	1	
883	17.944	14.715	6	5.06E+00	2.54E+02	5.06E+00	2	1	
885	17.712	14.726	1	1.35E+01	8.29E+02	1.35E+01	2	1	

Case 2b: Protected (Skin
Exposure)

12 rounds at aimpoint (17.65, 15.05)									
768	18.003	14.798	7	2.07E+02	1.03E+04	1.49E+04			9
774	17.506	14.808	6	1.72E+02	1.03E+04	1.49E+04			9
776	17.999	14.606	4	1.26E+02	7.20E+02	1.15E+03			6
846	17.548	14.720	33	1.42E+02	8.24E+02	1.32E+03			6
847	17.452	14.713	7	1.32E+02	7.66E+02	1.23E+03			6
848	17.619	14.598	28	3.86E+01	3.91E+02	5.97E+02			5
849	17.847	14.523	14	5.43E+00	1.23E+02	1.81E+02			3
850	17.645	14.519	5	5.58E+00	1.22E+02	1.80E+02			3
851	17.522	14.526	16	9.19E+00	1.91E+02	2.82E+02			4
856	17.750	14.796	9	2.58E+02	2.63E+03	4.02E+03			8
864	17.794	14.710	24	2.04E+02	2.60E+03	3.92E+03			7
868	17.645	14.717	10	1.22E+02	7.55E+02	1.20E+03			6
872	17.453	14.800	1	2.32E+02	2.50E+03	3.80E+03			7
883	17.944	14.715	6	1.15E+02	7.26E+02	1.15E+03			6
885	17.712	14.726	1	1.46E+02	2.37E+03	3.53E+03			7

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (17.65, 15.50)									
768	18.003	14.798	7	7.20E+02	3.76E+02	1.26E+03	6	6	6
774	17.506	14.808	6	6.78E+02	4.40E+02	1.31E+03	6	6	6
776	17.999	14.606	4	1.24E+01	4.81E+01	8.11E+01	2	1	2
846	17.548	14.720	33	2.60E+01	1.09E+02	1.82E+02	2	1	3
847	17.452	14.713	7	1.75E+01	7.72E+01	1.28E+02	2	1	3
848	17.619	14.598	28	1.16E+01	4.71E+01	7.89E+01	2	1	2
849	17.847	14.523	14	5.34E+00	2.31E+01	3.83E+01	2	1	2
850	17.645	14.519	5	5.23E+00	2.25E+01	3.74E+01	2	1	2
851	17.522	14.526	16	6.47E+00	2.45E+01	4.15E+01	2	1	2
856	17.750	14.796	9	7.18E+01	1.75E+02	3.22E+02	4	3	4
864	17.794	14.710	24	9.85E+01	1.61E+02	3.29E+02	4	3	4
868	17.645	14.717	10	2.83E+01	1.11E+02	1.87E+02	2	1	3
872	17.453	14.800	1	7.23E+01	1.64E+02	3.07E+02	4	3	4
883	17.944	14.715	6	2.93E+01	1.09E+02	1.85E+02	2	1	3
885	17.712	14.726	1	1.42E+02	1.77E+02	3.95E+02	5	4	4

Case 2a: Protected (Eye,
Respiratory Exposure)

24 rounds at aimpoint (17.65, 15.40)									
768	18.003	14.798	7	1.23E+01	4.45E+02	1.23E+01	2	1	
774	17.506	14.808	6	1.19E+01	4.80E+02	1.19E+01	2	1	
776	17.999	14.606	4	2.14E+00	4.91E+01	2.14E+00	1	1	
846	17.548	14.720	33	2.07E+00	7.40E+01	2.07E+00	1	1	
847	17.452	14.713	7	2.00E+00	6.04E+01	2.00E+00	1	1	
848	17.619	14.598	28	2.30E+00	4.17E+01	2.30E+00	1	1	
849	17.847	14.523	14	1.63E+00	1.76E+01	1.63E+00	1	1	
850	17.645	14.519	5	1.58E+00	1.73E+01	1.58E+00	1	1	
851	17.522	14.526	16	1.96E+00	2.08E+01	1.96E+00	1	1	
856	17.750	14.796	9	2.72E+00	1.37E+02	2.72E+00	1	1	
864	17.794	14.710	24	3.11E+00	1.52E+02	3.11E+00	1	1	
868	17.645	14.717	10	2.05E+00	7.66E+01	2.05E+00	1	1	
872	17.453	14.800	1	2.45E+00	1.38E+02	2.45E+00	1	1	
883	17.944	14.715	6	2.05E+00	7.55E+01	2.05E+00	1	1	
885	17.712	14.726	1	3.28E+00	1.62E+02	3.28E+00	1	1	

Case 2b: Zero to Nine Minutes*
(protected)

24 rounds at aimpoint (17.65, 15.40)									
768	18.003	14.798	7	2.05E+02	1.27E+03	2.02E+03			7
774	17.506	14.808	6	1.88E+02	1.37E+03	2.15E+03			7
776	17.999	14.606	4	1.43E+01	1.40E+02	2.14E+02			3
846	17.548	14.720	33	1.95E+01	2.12E+02	3.22E+02			4
847	17.452	14.713	7	1.61E+01	1.73E+02	2.63E+02			4
848	17.619	14.598	28	1.17E+01	1.19E+02	1.82E+02			3
849	17.847	14.523	14	6.15E+00	5.03E+01	7.80E+01			2
850	17.645	14.519	5	5.98E+00	4.95E+01	7.67E+01			2
851	17.522	14.526	16	7.69E+00	5.96E+01	9.28E+01			2
856	17.750	14.796	9	7.15E+01	3.93E+02	6.33E+02			5
864	17.794	14.710	24	7.64E+01	4.35E+02	6.98E+02			5
868	17.645	14.717	10	1.98E+01	2.19E+02	3.33E+02			4
872	17.453	14.800	1	6.54E+01	3.94E+02	6.28E+02			5
883	17.944	14.715	6	2.00E+01	2.16E+02	3.29E+02			4
885	17.712	14.726	1	7.26E+01	4.64E+02	7.35E+02			5

Mustard (HD) 250kg TBM
Light Attack
Height of Release: 500m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (17.65, 15.20)									
774	17.506	14.808	6	2.58E+00	7.84E+00	1.38E+01	1	1	1
846	17.548	14.720	33	2.64E+01	8.00E+01	1.41E+02	2	1	3
847	17.452	14.713	7	1.54E-01	2.20E+00	3.30E+00	1	1	1
848	17.619	14.598	28	4.32E+01	1.24E+02	2.20E+02	2	1	3
849	17.847	14.523	14	1.07E+00	2.60E+00	4.78E+00	1	1	1
850	17.645	14.519	5	1.95E+01	4.88E+01	8.92E+01	2	1	2

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

851	17.522	14.526	16	5.68E+00	1.38E+01	2.54E+01	2	1	2
856	17.750	14.796	9	2.27E+01	6.91E+01	1.21E+02	2	1	3
864	17.794	14.710	24	6.73E+00	2.14E+01	3.73E+01	2	1	2
868	17.645	14.717	10	1.68E+02	4.53E+02	8.15E+02	6	5	6
872	17.453	14.800	1	7.67E-05	2.99E-01	4.27E-01	1	1	1
885	17.712	14.726	1	8.81E+01	2.52E+02	4.48E+02	4	3	4
1 round at aimpoint (17.55, 14.95)									
774	17.506	14.808	6	0.00E+00	3.23E-03	0.00E+00	1	1	
1 round at aimpoint (17.55, 14.95)									
774	17.506	14.808	6	1.47E-03	4.30E+01	6.14E+01			2
846	17.548	14.720	33	1.80E+00	2.41E+03	3.44E+03			7
847	17.452	14.713	7	0.00E+00	1.28E-01	1.83E-01			1
848	17.619	14.598	28	0.00E+00	1.08E+01	1.54E+01			1
851	17.522	14.526	16	0.00E+00	7.97E-01	1.14E+00			1
868	17.645	14.717	10	0.00E+00	3.64E-01	5.20E-01			1

Mustard (HD) 500kg TBM
Moderate Attack
Height of Release: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
E	R	S							
2 rounds at aimpoint (17.95, 15.45)									
774	17.506	14.808	6	2.68E+01	7.57E+01	1.35E+02	2	1	3
776	17.999	14.606	4	1.70E-02	3.70E-01	5.46E-01	1	1	1
846	17.548	14.720	33	4.78E+01	1.29E+02	2.32E+02	2	1	3
847	17.452	14.713	7	6.86E+00	1.99E+01	3.53E+01	2	1	2
848	17.619	14.598	28	4.09E+01	1.02E+02	1.87E+02	2	1	3
849	17.847	14.523	14	5.09E+00	1.08E+01	2.05E+01	2	1	1
850	17.645	14.519	5	2.32E+01	5.19E+01	9.73E+01	2	1	2
851	17.522	14.526	16	1.13E+01	2.48E+01	4.67E+01	2	1	2
856	17.750	14.796	9	8.77E+01	2.16E+02	3.96E+02	4	3	4
864	17.794	14.710	24	2.91E+01	7.97E+01	1.43E+02	2	1	3
868	17.645	14.717	10	1.12E+02	2.77E+02	5.08E+02	5	4	5
872	17.453	14.800	1	6.29E+00	1.92E+01	3.37E+01	2	1	2
883	17.944	14.715	6	3.13E-01	2.35E+00	3.67E+00	1	1	1
885	17.712	14.726	1	9.69E+01	2.38E+02	4.37E+02	4	3	4
2 rounds at aimpoint (14.60, 15.50)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
2 rounds at aimpoint (14.60, 15.50)									
762	14.929	14.860	4	3.11E-07	1.16E+02	1.66E+02			3
766	14.298	15.349	9	9.77E-01	1.53E+03	2.19E+03			7
813	14.991	14.868	2	1.74E-07	3.30E+01	4.71E+01			2
853	14.322	15.398	16	3.66E-01	7.97E+02	1.14E+03			6
857	14.991	14.782	10	0.00E+00	3.47E-02	4.96E-02			1

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

Mustard (HD) 500kg TBM
Heavy Attack
Height of Release: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
E	R	S							
4 rounds at aimpoint (17.50, 15.95)									
768	18.003	14.798	7	1.40E+01	3.98E+01	7.09E+01	2	1	2
774	17.506	14.808	6	1.01E+02	2.54E+02	4.64E+02	5	4	4
776	17.999	14.606	4	6.73E+00	1.14E+01	2.30E+01	2	1	1
846	17.548	14.720	33	2.20E+02	5.43E+02	9.96E+02	6	5	6
847	17.452	14.713	7	2.60E+01	6.31E+01	1.16E+02	2	1	3
848	17.619	14.598	28	1.81E+02	3.95E+02	7.45E+02	6	5	5
849	17.847	14.523	14	1.68E+01	2.64E+01	5.45E+01	2	1	2
850	17.645	14.519	5	9.78E+01	2.24E+02	4.18E+02	4	3	4
851	17.522	14.526	16	6.69E+01	1.64E+02	3.01E+02	3	2	4
856	17.750	14.796	9	1.63E+02	3.95E+02	7.27E+02	6	5	5
864	17.794	14.710	24	9.51E+01	2.05E+02	3.88E+02	4	3	4

Table B5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Movement to Contact

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

868	17.645	14.717	10	3.18E+02	6.97E+02	1.31E+03	6	6	6
872	17.453	14.800	1	1.55E+01	4.25E+01	7.62E+01	2	1	2
883	17.944	14.715	6	2.87E+01	6.77E+01	1.25E+02	2	1	3
885	17.712	14.726	1	1.74E+02	3.82E+02	7.20E+02	6	5	5
4 rounds at aimpoint (14.20, 16.15)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
4 rounds at aimpoint (14.20, 16.15)									
760	14.400	15.346	2	0.00E+00	6.68E-05	9.54E-05			1
766	14.298	15.349	9	9.37E-01	1.60E+03	2.29E+03			7
853	14.322	15.398	16	3.57E-01	6.29E+02	8.99E+02			6

APPENDIX C

HEAVY BRIGADE, FORWARD MANEUVER, OFFENSE

Appendix C: Heavy Brigade, Forward Maneuver, Offense

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Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Mech Inf Bn 1	HHC		Bn HQ Sec	Tac CP Element	1 M2	116	5	Tac CP
				Main CP Element	2 HMMWV	32	2	Main CP
						33	1	Main CP
			S-1 Sec		1 HMMWV	40	5	Cbt Train
			S-2 Sec	Tac CP Element	1 M577	126	4	Tac CP
				(1) riding in APC in S3 Sec				
			S-3 Sec	Main CP Element				
				Tac CP Element	1 M2	117	3	Tac CP
					M113	158	4	Main CP
				Main CP Element	1 M577	124	6	Main CP
					3 HMMWV	34	2	Main CP
						35 (200)	0(2)	Main CP
						41	2	Main CP
			FSE Sec		1 HMMWV	66	2	Main CP
					1 COLT	185 (201)	0(2)	Main CP
			Tac CP Sec	Tac CP Element	1 HMMWV	36	1	Main CP
				(2) riding in APC in S3 Sec				
			S-4 Sec	Cbt Trains CP Element	1 M577	131	2	Main CP
					1 HMMWV	38(206)	0(2)	Cbt Train
			Co HQ	Main CP Element	1 HMMWV	39(202)	0(2)	Cbt Train
	HHC	Bn Commo Plt		Main CP Element	2 HMMWV	42(203)	0(2)	Main CP
						37	2	Main CP
				Cbt Trns CP Element	1 M577	130	3	Cbt Train
					1 HMMWV	43	1	Cbt Train
					3 CYCLES	71	1	Cbt Train
						72	1	Cbt Train
						73	1	Cbt Train
	HHC	Bn Scout Plt	HQ Sec		2 M3	118	5	Fwd
						119	5	Fwd
			2 Scout Sections		4 M3	120	5	Fwd
						121	5	Fwd
						122	5	Fwd
						123	5	Fwd
	HHC	Hvy Mort Plt	Mort Plt HQ		2 HMMWV	30	2	Bn rear

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon # 31	Crew 1	Location Bn rear
Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ		2 M577	126	3	Bn rear
			Mort Sec HQ			127	3	Bn rear
					6 4.2 MTR	301	4	Bn rear
						302	4	Bn rear
						303	4	Bn rear
						304	4	Bn rear
						305	4	Bn rear
						306	4	Bn rear
	HHC	Bn Med Plt	Plt HQ		1 HMMWV	44	2	Cbt Train
			Aid Station		2 Trucks (2 in 1 icon)	281	2	Cbt Train
					2 M577-AMB	322	4	Cbt Train
						323	3	Cbt Train
			Evac Sec		7 M113-AMB (7 in 1 icon)	324	3	Cbt Train
						325(240)	9(5)	Cbt Train
	HHC	Bn Sprt Plt		Class III & V Team	4 HEMMT C (4 in 1 icon)	319 (227-8)	0(8)	Cbt Train
					4 HEMMT P (4 in 1 icon)	320(226)	0(4)	Cbt Train
	HHC	Bn Maint Plt	Plt HQ		2 HMMWV	45(207)	0(2)	Cbt Train
						46	0	Cbt Train
			Admin Sec		4 Trucks	277	1	Cbt Train
						278	1	Cbt Train
						279	1	Cbt Train
						280	2	Cbt Train
			Sprt Sec		1 Truck	263(208)	0(2)	Cbt Train
					3 M88A1	140	2	Cbt Train
						141	2	Cbt Train
						135	2	Cbt Train
					1 HEMMT W	321	1	Cbt Train
			Maint/SVC Sec		1 Truck	268(247)	0(5)	Cbt Train
					1 HMMWV	47(209)	0(2)	Cbt Train
					M113	157	2	Cbt Train
					4 Trucks	265	3	Cbt Train
						267(229)	0(4)	Cbt Train
						266(248)	0(5)	Co Train
						264	6	Co Train
				4 Rifle Co Maint Teams	1 Truck for 16 Maint Vehicles	269	2	Co Train
					4 M88A1	136	3	Co Train
						137	3	Co Train

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec	8 Trucks (2 in 1 icon)	4 M113	138	3	Co Train
						139	3	Co Train
						153	4	Co Train
						154	4	Co Train
						155	4	Co Train
					AA Co Maint Team	156	4	Co Train
						273	4	Co Train
						274	4	Cbt Train
						275	4	Cbt Train
						276	4	Cbt Train
Mech Inf Bn 1	Rifle Co 1	3 Rifle Plt	HQ		2 M2	M113	6	Co Train
						1 Truck	2	Cbt Train
					2 M2	102	3	reserve
						103(198)	1(2)	reserve
					M113	151	2	Cbt Train
						48	1	Cbt Train
					2 HMMWV	49(199)	0(2)	Cbt Train
					12 M2	104(235)	4(5)	reserve
						105(243)	4(5)	reserve
						107(244)	4(5)	reserve
						108(245)	4(5)	reserve
						109(246)	4(5)	reserve
						110(242)	4(5)	reserve
						112(241)	4(5)	reserve
						113(239)	4(5)	reserve
						115(249)	4(5)	reserve
						106(195)	2(2)	reserve
						111(196)	2(2)	reserve
						114(197)	2(2)	reserve
Mech Inf Bn 1	Rifle Co 2	3 Rifle Plt	HQ		2 M2	88	3	line
						89	3	line
					M113	160	2	Co Train
						19	1	Co Train
					1 HMMWV	20	2	Co Train
						76	9	line
					12 M2	77	9	line
						79	9	line
						80	9	line
						81	9	line
						83	9	line
						84	9	line
						85	9	line
						87	9	line

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						78	4	line
						82	4	line
						86	4	line
Mech Inf Bn 1	Rifle Co 3	3 Rifle Plt	HQ		2 M2	74	3	line
						75	3	line
					M113	159	2	Co Train
					2 HMMWV	21	1	Co Train
						22	2	Co Train
Mech Inf Bn 1	Rifle Co 3	3 Rifle Plt	HQ		12 M2	101	9	line
						99	9	line
						98	9	line
						90	9	line
						91	9	line
						93	9	line
						94	9	line
						95	9	line
						97	9	line
						100	4	line
						92	4	line
						96	4	line
Mech Inf Bn 1	AA Co	3 AA Plt	HQ Sec		M113	165	4	line
					2 HMMWV	55	2	Co Train
						56	2	Co Train
					3 M113	162	3	line
						163	3	line
						164	3	line
					12 ITV-TOW	168	4	line
						169	4	line
						170	4	line
						171	4	line
						172	4	line
						173	4	line
						174	4	line
						175	4	line
						176	4	line
						177	4	line
						178	4	line
						179	4	line
				ATTACHMENTS/OPCON/DIRECT SUPPORT UNITS IN TFA AREA				
	Tank Co 1		HQ Sec		2 M1/A1	1	4	line
						2	4	line
					2 HMMWV	17	2	Co Train
						18	2	Co Train
					1 Truck	282	2	Bn Trains

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location								
Mech Inf Bn 1	Tank Co 1	Tank Plt			12 M1/A1 (4 each)	3	4	line								
						4	4	line								
						5	4	line								
						6	4	line								
						7	4	line								
						8	4	line								
						9	4	line								
						10	4	line								
						11	4	line								
						12	4	line								
						13	4	line								
						14	4	line								
						Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ	3 Gun Squads	3 Vulcans (4 each)	M113	142	2	1 TF HHC Area		
											1 HMMWV	16	2	1 TF HHC Area		
		180	4	1 TFA												
		181	4	1 TFA												
		182	4	1 TFA												
	Missile Plt(-)	Missile Sec	5 Missile Teams	5 HMMWVarmed w/Stinger	1 HMMWV						15	3	1 TF HHC Area			
											285	2	1 TFA Co			
											286	2	1 TF HHC Area			
											287	2	1 TFA Co			
											290	2	1 TFA Co			
											291	2	1 TFA Co			
Mech Inf Bn 1					Eng Co 1						Co HQ		M113	149	3	1 TFA
													2 Trucks	271(213)	0(3)	1 TFA
														272(214)	0(3)	1 TFA
													1 HMMWV	51	2	1 TFA
	Eng Co 1	2 Eng Plt	2 Plt HQ	6 Eng Sqd									2 M113	161	2	1 TFA
														143	2	1 TFA
													2 HMMWV	53(204)	0(2)	1 TFA
														54	2	1 TFA
						6 M113	144(232)	3(5)	1 TFA							
					145(223)	3(5)	1 TFA									
					146(234)	3(5)	1 TFA									
					150(237)	3(5)	1 TFA									
					166(238)	3(5)	1 TFA									
					147(236)	3(5)	1 TFA									
Eng Co 1	Asl & Obs Plt	Plt HQ		2 HMMWV	50	2	Fwd									
					52	2	1 TFA									
				2 Assault Sec	4 AVLB (2 in 1 icon)	253	4	Fwd								

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						254	4	Fwd
					2 CEV (2 in 1 icon)	190	8	Fwd
			Obstacle Sec		7 ACE (7 in 1 icon)	255	7	1 TFA
Fld Arty Bn	HHB		Commd Sec		2 HMMWV	64(231)	0(5)	Arty Bn CP
						62	6	Arty Bn CP
			Batt HQ		1 HMMWV	59(205)	1(2)	Arty Bn CP
			Ops Sec		1 M577	134	4	Arty Bn CP
					1 HMMWV	68	4	Arty Bn CP
Fld Arty Bn	HHB		Fire Dir Sec		1 M577	133	5	Arty Bn CP
			Fire Dir Sec		1 Truck	283(212)	0(4)	Arty Bn CP
			Intel Sec		1 M577	132	4	Arty Bn CP
	HHB	Survey Plt	Plt HQ		1 HMMWV	67	3	Arty Bn CP
			Survey Sec		1 HMMWV	63	3	Arty Bn CP
	HHB	Commo Plt	Plt HQ		2 HMMWV	60(230)	1(5)	Arty Bn CP
			Wire Sec		4 HMMWV	61	5	Arty Bn CP
			Radio Sec		3 HMMWV	65	3	Arty Bn CP
				1 Tank Co FIST Tm	FIST-V	310	4	line
				3 Mech Inf FIST Tm	FIST-V	307	4	line
						308	4	line
						309	4	line
Fld Arty Bn	Fld Arty Batt 1		Batt HQ		1 Truck	259	3	1 TFA
					2 HMMWV	23	2	1 TFA
						25	2	1 TFA
			Commo Sec		1 HMMWV	28	2	1 TFA
	Fld Arty Batt 1	2 Firing Plt	Plt HQ		4 HMMWV	24(194)	0(2)	1 TFA
						26(210)	0(2)	1 TFA
						27	2	1 TFA
						29	2	1 TFA
			2 Fire Direction Centers		2 M577	128(216)	4(4)	1 TFA
						129(225)	4(4)	1 TFA

Table C1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Offense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
			8 Howitzer Sec		8 M548	311(221)	0(4)	1 TFA
						312(217)	0(4)	1 TFA
						313(218)	0(4)	1 TFA
						314(219)	0(4)	1 TFA
						315(220)	0(4)	1 TFA
						316(222)	0(4)	1 TFA
						217(223)	0(4)	1 TFA
						318(224)	0(4)	1 TFA
					8 M109	293	5	1 TFA
						294	5	1 TFA
						295	5	1 TFA
						296	5	1 TFA
						297	5	1 TFA
						298	5	1 TFA
						299	5	1 TFA
						300	5	1 TFA
			Ammo Sec		6 Trucks	260(191)	0(2)	1 TFA
Fld Arty Bn		2 Firing Plt	Ammo Sec			261	2	1 TFA
						262(192)	0(2)	1 TFA
						256	2	1 TFA
						257(193)	0(2)	1 TFA
						258	2	1 TFA
	Fld Arty Batt 1	Smoke Plt	Plt HQ		M113	167	3	Fwd
				2 Smoke Squads (6tms)	6 SMKGEN (6 in 1 icon)	70(250)	3(5)	Fwd
						0(251)	0(5)	
						0(252)	0(5)	
				1 Sprt sqd	2 Trucks (2 in 1 icon)	284(211)	2(2)	Cbt Train
Fld Arty Bn	Fld Arty Batt 1	GSR Plt 2	Plt HQ		1 HMMWV	69	2	1 TFA
				2 GSR Sqds	4 AN/PPS-5	186	3	Fwd
						187	3	Fwd
						188	3	Fwd
						189	3	Fwd
<div> <div>Notes:</div> <div>FLD TRN: In brigade with FSB</div> <div>CBT TRN: In battalion near rear</div> <div>MAINT: In battalion near rear</div> <div>In BSA: BDE HHC</div> <div>FSB</div> <div>FLD TRN</div> </div>							0	
							0	
							0	
							0	
							0	
							0	
							0	
<div> <div>Assumptions:</div> <div>* No effort has been made to show the support elements (maint, supply, medic, and mess) that would accompany the tank co when it joined the mech TF and the rifle company that departed, because the total number of vehicles and personnel would be the same for all practical purposes.</div> <div>* The ARTY battalion CP has arbitrarily been placed in the TF area as a representative of brigade assets that would be located in the TF area. The number of units could be larger or smaller depending on terrain and mission.</div> </div>							0	

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
1	11.465	50.497	4	line	M1A1	HB FM OFF		Tank Co 1		HQ Sec			
2	11.564	50.495	4	line	M1A1	HB FM OFF		Tank Co 1		HQ Sec			
3	8.693	50.315	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
4	9.225	50.221	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
5	9.374	50.524	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
6	9.225	50.524	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
7	9.097	50.534	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
8	8.954	50.542	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
9	8.617	50.560	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
10	8.495	50.552	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
11	8.373	50.534	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
12	8.250	50.547	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
13	11.260	50.508	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
14	11.374	50.497	4	line	M1A1	HB FM OFF		Tank Co 1	Tank Plt				
15	9.347	45.818	3	1 TF HHC Area	HMMWV	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)	Missile Sec			
16	9.315	45.716	2	1 TF HHC Area	HMMWV	HB FM OFF		Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ			
17	8.700	49.576	2	Co Train	HMMWV	HB FM OFF		Tank Co 1		HQ Sec			
18	9.008	49.534	2	Co Train	HMMWV	HB FM OFF		Tank Co 1		HQ Sec			
19	6.838	49.795	1	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 2		HQ			
20	6.666	50.008	2	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 2		HQ			
21	11.369	49.655	1	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 3		HQ			
22	11.177	49.570	2	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 3		HQ			
23	7.914	48.242	2	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
24	7.910	48.331	0	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
25	9.203	47.020	2	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			
26	7.880	48.230	0	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
27	9.010	46.883	2	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
28	7.866	48.313	2	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Commo Sec			
29	9.155	46.980	2	1 TFA	HMMWV	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
30	10.093	49.471	2	Bn Rear	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
31	7.404	49.288	1	Bn Rear	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
32	9.162	45.542	2	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element		
33	9.134	45.693	1	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		Bn HQ Sec	Main CP Element		
34	9.236	45.448	2	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
35	9.183	45.747	0	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
36	9.184	45.669	1	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		TACP Sec	Main CP Element		
37	9.376	45.557	2	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
38	10.775	42.495	0	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		S-4 Sec	Cbt Trains CP Element		
39	9.291	45.501	0	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		Co HQ	Main CP Element		
40	10.792	42.386	5	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		S-1 Sec			
41	9.312	45.638	2	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
42	9.406	45.490	0	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
43	10.740	42.320	1	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Trains CP Element		
44	10.438	42.496	2	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Med Plt	Plt HQ			
45	10.946	42.442	0	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			
46	11.015	42.390	0	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
47	10.894	42.401	0	Cbt Train	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
48	10.165	46.551	1	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
49	10.248	46.889	0	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
50	9.107	49.460	2	forward	HMMWV	HB FM OFF		Eng Co 1	Asl & Obs Plt	Plt HQ			
51	9.325	48.044	2	1 TFA	HMMWV	HB FM OFF		Eng Co 1		Co HQ			
52	9.035	48.198	2	1 TFA	HMMWV	HB FM OFF		Eng Co 1	Asl & Obs Plt	Plt HQ			
53	9.255	48.040	0	1 TFA	HMMWV	HB FM OFF		Eng Co 1	Eng Plt 1	Plt HQ 2			
54	9.191	48.044	2	1 TFA	HMMWV	HB FM OFF		Eng Co 1	Eng Plt 1	Plt HQ 2			
55	9.529	49.086	2	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	AA Co		HQ			
56	9.628	49.104	2	Co Train	HMMWV	HB FM OFF	Mech Inf Bn 1	AA Co		HQ			
57*	10.471	46.633	0		HMMWV								
58*	10.576	46.901	0		HMMWV								
59	6.988	45.463	1	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB		Batt HQ			
60	6.741	45.290	1	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB	Commo Plt	Plt HQ			
61	6.835	45.503	5	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB	Commo Plt	Wire Sec			
62	6.947	45.334	6	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB		Commd Sec			
63	6.825	45.253	3	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB		Survey Sec			
64	6.881	45.266	0	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB		Commd Sec			
65	6.947	45.513	3	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB	Commo Plt	Radio Sec			
66	9.451	45.758	2	Main CP	HMMWV	HB FM OFF	Mech Inf Bn 1	HHC		FSE Sec			
67	6.814	45.579	3	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB	Survey Plt	Plt HQ			
68	6.881	45.563	4	Arty Bn CP	HMMWV	HB FM OFF	Fld Arty Bn	HHB		Ops Sec			
69	6.057	48.927	2	1 TFA	HMMWV				GSR Plt 2	Plt HQ			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
70	9.286	45.768	3	forward	SMKGEN (6 in 1 icon)	HB FM OFF			Smoke Plt			2 Smoke Sqds (6 tms)	
71	10.734	42.486	1	Cbt Train	CYCLE	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Trains CP Element		
72	10.680	42.398	1	Cbt Train	CYCLE	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Trains CP Element		
73	10.841	42.495	1	Cbt Train	CYCLE	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Trains CP Element		
74	11.272	50.379	3	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3		HQ			
75	10.670	50.291	3	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3		HQ			
76	5.966	50.466	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
77	6.112	50.469	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
78	6.340	50.468	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
79	6.239	50.475	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
80	6.819	50.693	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
81	6.712	50.630	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
82	6.903	50.608	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
83	6.972	50.488	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
84	7.296	50.661	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
85	7.381	50.566	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
86	7.458	50.491	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
87	7.546	50.383	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
88	6.707	50.453	3	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2		HQ			
89	7.474	50.111	3	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 2		HQ			
90	10.433	50.482	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
91	10.532	50.469	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
92	10.618	50.471	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
93	10.714	50.458	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
94	10.806	50.458	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
95	10.886	50.463	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
96	10.965	50.466	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
97	11.080	50.466	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
98	8.568	49.822	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
99	8.667	49.854	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
100	8.855	49.854	4	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
101	8.983	49.851	9	line	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
102	10.494	46.773	3	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
103	9.999	46.817	1	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
104	10.012	47.018	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
105	10.124	47.005	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
106	10.228	47.008	2	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
107	10.338	46.997	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
108	10.752	46.815	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
109	10.818	46.635	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
110	10.859	46.478	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
111	10.656	46.929	2	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
112	10.708	46.424	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
113	10.612	46.387	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
114	10.539	46.317	2	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
115	10.400	46.322	4	reserve	M2	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
116	10.166	49.480	5	Tac CP	M2	HB FM OFF	Mech Inf Bn 1	HHC		Bn HQ Sec	TAC CP Element		
117	10.234	49.391	3	Tac CP	M2	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	TAC CP Element		
118	12.860	50.139	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
119	12.821	49.837	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
120	13.056	49.401	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
121	13.015	49.683	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
122	12.474	50.350	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
123	12.702	50.277	5	forward	M3	HB FM OFF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
124	9.209	45.648	6	Main CP	M577	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
125	9.207	45.539	4	Tac CP	M577	HB FM OFF	Mech Inf Bn 1	HHC		S-2 Sec	Main CP Element		
126	7.233	49.406	3	Bn Rear	M577	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
127	8.809	48.886	3	Bn Rear	M577	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
128	9.059	46.875	4	1 TFA	M577	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 1			
129	7.927	48.331	4	1 TFA	M577	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 2			
130	10.790	42.307	3	Cbt Train	M577	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Trains CP Element		
131	10.723	42.397	2	Cbt Train	M577	HB FM OFF	Mech Inf Bn 1	HHC		S-4 Sec	Cbt Trains CP Element		
132	6.823	45.356	4	Arty Bn CP	M577	HB FM OFF	Fld Arty Bn	HHB		Intel Sec			
133	6.760	45.453	5	Arty Bn CP	M577	HB FM OFF	Fld Arty Bn	HHB		Fire Dir Sec			
134	6.897	45.422	4	Arty Bn CP	M577	HB FM OFF	Fld Arty Bn	HHB		Ops Sec			
135	10.895	42.320	2	Cbt Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
136	8.845	49.551	3	Cbt Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
137	8.931	49.541	3	Co Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
138	11.245	49.685	3	Co Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
139	6.753	49.776	3	Co Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
140	11.090	42.435	2	Cbt Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
141	10.957	42.331	2	Cbt Train	M88A1	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
142	10.598	42.284	2	1 TF HHC Area	M113	HB FM OFF		Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ			
143	9.168	48.069	2	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 1	Plt HQ 1			
144	9.281	48.111	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 1	
145	9.077	48.397	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 2	
146	9.170	48.242	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 3	
147	9.224	48.123	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 6	
148*	8.999	48.267	0		M113								
149	9.103	48.033	3	1 TFA	M113	HB FM OFF		Eng Co 1		Co HQ			
150	9.155	48.357	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 4	
151	10.364	46.506	2	Co Train	M113	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
152	10.429	46.678	6	Co Train	M13	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				AA Co Maint Team
153	10.617	46.667	4	Co Train	M113	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
154	11.217	49.446	4	Co Train	M113	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
155	10.362	46.610	4	Co Train	M113	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
156	6.782	49.962	4	Co Train	M113	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
157	11.013	42.282	2	Cbt Train	M113	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
158	10.148	49.313	4	Main CP	M113	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	TAC CP Element		
159	11.226	49.815	2	Co Train	M113	HB FM OFF	Mech Inf Bn 1	Rifle Co 3		HQ			
160	6.656	49.852	2	Co Train	M113	HB FM OFF	Mech Inf Bn 1	Rifle Co 2		HQ			
161	9.225	46.968	2	1 TF	M113	HB FM OFF		Eng Co 1	Eng Plt 1	Plt HQ 1			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
162	5.938	49.926	3	line	M113	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
163	9.628	49.378	3	line	M113	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
164	10.250	46.682	3	line	M113	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
165	6.113	49.835	4	line	M113	HB FM OFF	Mech Inf Bn 1	AA Co		HQ			
166	8.984	48.395	3	1 TFA	M113	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 5	
167	9.347	45.802	3	forward	M113	HB FM OFF			Smoke Plt	Plt HQ			
168	5.836	50.035	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
169	5.800	49.861	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
170	9.510	49.506	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
171	9.409	49.498	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
172	10.079	49.696	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
173	9.889	49.626	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
174	10.064	46.471	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
175	9.819	46.598	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
176	10.057	46.658	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
177	9.973	46.643	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
178	5.792	49.720	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
179	5.972	50.150	4	line	ITV-TOW	HB FM OFF	Mech Inf Bn 1	AA Co	AA Plt				
180	10.861	43.129	4	1 TFA	VULCAN	HB FM OFF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 1	
181	11.213	43.174	4	1 TFA	VULCAN	HB FM OFF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 2	
182	10.559	43.004	4	1 TFA	VULCAN	HB FM OFF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 3	
183*	19.790	37.623	0		VULCAN								
184	6.190	49.514	0		VULCAN								

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
185	9.321	45.883	0	Main CP	COLT	HB FM OFF	Mech Inf Bn 1	HHC		FSE Section			
186	12.487	49.863	3	forward	AN/PPS	HB FM OFF			GSR Plt 2			GSR SQUAD 1	
187	12.857	49.476	3	forward	AN/PPS	HB FM OFF			GSR Plt 2			GSR SQUAD 1	
188	6.139	49.026	3	forward	AN/PPS	HB FM OFF			GSR Plt 2			GSR SQUAD 2	
189	5.908	49.290	3	forward	AN/PPS	HB FM OFF			GSR Plt 2			GSR SQUAD 2	
190	9.092	48.131	8	forward	CEV (2 in 1 icon)	HB FM OFF		Eng Co 1	Asl & Obs Plt	Assault Sec 2			
191	9.196	46.746	2	1 TF	DISM (TRUCK)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
192	9.123	46.758	2	1 TF	DISM (TRUCK)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
193	7.974	48.204	2	1 TF	DISM (TRUCK)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
194	7.911	48.293	2	1 TF	DISM (HMMWV)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
195	10.224	46.931	2	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
196	10.654	46.844	2	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
197	10.503	46.322	2	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
198	9.994	46.745	2	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
199	10.245	46.833	2	Co Train	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1		HQ			
200	9.182	45.726	2	Main CP	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
201	9.312	45.828	2	Main CP	DISM (COLT)	HB FM OFF	Mech Inf Bn 1	HHC		FSE Section			
202	9.294	45.449	2	Main CP	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC		Co HQ	Main CP Element		
203	9.405	45.436	2	Main CP	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
204	9.256	48.008	2	1 TFA	DISM (HMMWV)	HB FM OFF		Eng Co 1	Eng Plt 1	Plt HQ 2			
205	6.956	45.454	2	Arty Bn CP	DISM (HMMWV)	HB FM OFF	Fld Arty Bn	HHB		Batt HQ			
206	10.774	42.454	2	Cbt Train	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC		S-4 Sec	Cbt Trains CP Element		
207	10.948	42.402	2	Cbt Train	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
208	11.091	42.478	2	Cbt Train	DISM (TRUCK)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
209	10.869	42.349	2	Cbt Train	DISM (HMMWV)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
210	7.880	48.198	2	1 TFA	DISM (HMMWV)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
211	10.748	42.548	2	Cbt Train	DISM (TRUCK (2 in 1 icon))	HB FM OFF			Smoke Plt			Sppt Sqd	
212	6.932	45.285	4	Arty Bn CP	DISM (TRUCK)	HB FM OFF	Fld Arty Bn	HHB		Fire Dir Sec			
213	9.046	48.117	3	1 TFA	DISM (TRUCK)	HB FM OFF		Eng Co 1		Co HQ			
214	9.112	48.189	3	1 TFA	DISM (TRUCK)	HB FM OFF		Eng Co 1		Co HQ			
215*	19.333	37.547	0		DISM								
216	9.062	46.820	4	1 TFA	DISM (M577)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 1			
217	9.083	47.027	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
218	9.051	47.019	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
219	9.013	47.028	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
220	8.964	47.019	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
221	7.866	48.425	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
222	7.904	48.425	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
223	7.951	48.433	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 2	
224	7.819	48.424	4	1 TFA	DISM (M548)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
225	7.929	48.300	4	1 TFA	DISM (M577)	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 2			
226	10.758	42.201	4	Cbt Train	DISM (HEMMTP (4 in 1 icon))	HB FM OFF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
227	10.836	42.132	4	Cbt Train	DISM (HEMMTP (4 in 1 icon))	HB FM OFF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
228	10.859	42.183	4	Cbt Train	DISM (HEMMTP (4 in 1 icon))	HB FM OFF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
229	10.939	42.475	4	Cbt Train	DISM (TRUCK)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
230	6.761	45.361	5	Arty Bn CP	DISM (HMMWV)	HB FM OFF	Fld Arty Bn	HHB	Commo Plt	Plt HQ			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
231	6.880	45.213	5	Arty Bn CP	DISM (HMMWV)	HB FM OFF	Fld Arty Bn	HHB		Command Sec			
232	9.283	48.051	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 1	
233 [#]	9.076	48.344	5										
234	9.171	48.201	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 3	
235	10.014	46.937	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
236	9.223	48.060	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 6	
237	9.156	48.309	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 4	
238	8.987	48.346	5	1 TFA	DISM (M113)	HB FM OFF		Eng Co 1	Eng Plt 2			Eng Sqd 5	
239	10.579	46.422	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
240	10.491	42.450	5	Cbt Train	DISM (M113-AMB (7 in 1 icon))	HB FM OFF	Mech Inf Bn 1	HHC	BN Med Plt	Evac Sec			
241	10.706	46.484	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
242	10.798	46.470	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
243	10.126	46.910	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
244	10.336	46.922	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
245	10.750	46.730	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
246	10.818	46.559	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
247	10.846	42.387	5	Cbt Train	DISM (TRUCK)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
248	10.955	42.100	5	Cbt Train	DISM (TRUCK)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
249	10.362	46.339	5	reserve	DISM (M2)	HB FM OFF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
250	9.367	45.631	5	forward	DISM (SMKGEN (6 in 1 icon))	HB FM OFF			Smoke Plt			2 Smoke Sqds (6 tms)	
251	9.378	45.682	5	forward	DISM	HB FM OFF			Smoke Plt			3 Smoke Sqds (6 tms)	
252	9.381	45.733	5	forward	DISM	HB FM OFF			Smoke Plt			4 Smoke Sqds (6 tms)	
253	8.778	49.558	4	forward	AVLB (2 in 1 icon)	HB FM OFF		Eng Co 1	Asl & Obs Plt	Assault Sec 1			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
254	11.364	49.446	4	forward	AVLB (2 in 1 icon)	HB FM OFF		Eng Co 1	Asl & Obs Plt	Assault Sec 1			
255	9.070	49.530	7	1 TFA	ACE (7 in 1 icon)	HB FM OFF		Eng Co 1	Asl & Obs Plt	Obstacle Sec			
256	7.785	48.318	2	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
257	7.972	48.253	0	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
258	7.892	48.149	2	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
259	7.839	48.229	3	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			
260	9.193	46.796	0	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
261	9.121	46.815	2	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
262	9.017	46.803	0	1 TFA	TRUCK	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
263	11.089	42.513	0	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
264	10.880	42.213	6	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
265	11.038	42.174	3	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
266	10.956	42.146	0	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
267	10.937	42.515	0	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
268	10.873	42.442	0	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
269	10.759	42.060	2	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team1
270	11.077	42.122	2	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				AA Co Maint Team
271	9.049	48.053	0	1 TFA	TRUCK	HB FM OFF		Eng Co 1		Co HQ			
272	9.104	48.251	0	1 TFA	TRUCK	HB FM OFF		Eng Co 1		Co HQ			
273	10.992	42.130	4	Co Train	TRUCK (2 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
274	10.943	42.205	4	Cbt Train	TRUCK (2 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
275	10.922	42.146	4	Cbt Train	TRUCK (2 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
276	11.113	42.169	4	Cbt Train	TRUCK (2 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
277	10.886	42.648	1	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
278	10.882	42.109	1	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
279	11.151	42.140	1	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
280	11.031	42.559	2	Cbt Train	TRUCK	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
281	10.438	42.395	2	Cbt Train	TRUCK (2 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	BN Med Plt	Aid Station			
282	10.719	42.175	2	Bn Trains	TRUCK	HB FM OFF		Tank Co 1		HQ Sec			
283	6.930	45.221	0	Arty Bn CP	TRUCK	HB FM OFF	Fld Arty Bn	HHB		Fire Dir Sec			
284	10.749	42.595	2	Cbt Train	TRUCK (2 in 1 icon)	HB FM OFF			Smoke Plt			Sppt Sqd	
285	9.931	47.046	2	1 TF Co Area	HM/STG	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
286	9.424	45.654	2	1 TF HHC Area	HM/STG	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
287	7.629	50.205	2	1 TF Co Area	HM/STG	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
288*	19.942	37.644	0		HM/STG								
289*	20.145	37.581	0		HM/STG								
290	10.956	50.319	2	1 TF Co Area	HM/STG	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
291	8.926	50.343	2	1 TF Co Area	HM/STG	HB FM OFF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
292	10.782	42.679	0		HM/STG								
293	7.936	48.474	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
294	7.870	48.475	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
295	7.829	48.482	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
296	7.905	48.473	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
297	9.070	47.086	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
298	9.042	47.071	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
299	8.995	47.083	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
300	8.958	47.076	5	1 TFA	155mm SP howitzer	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
301	7.333	49.509	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
302	7.223	49.531	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
303	7.102	49.534	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
304	8.733	49.028	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
305	8.648	49.028	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
306	8.827	49.020	4	Bn Rear	4.2MTR	HB FM OFF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
307	8.583	50.301	4	line	FISTV	HB FM OFF	Fld Arty Bn	HHB					Mech Inf FIST Tm 1
308	6.572	50.629	4	line	FISTV	HB FM OFF	Fld Arty Bn	HHB					Mech Inf FIST Tm 2
309	10.450	46.852	4	line	FISTV	HB FM OFF	Fld Arty Bn	HHB					Mech Inf FIST Tm 3
310	11.183	50.374	4	line	FISTV	HB FM OFF	Fld Arty Bn	HHB					Tank Co FIST Tm
311	7.867	48.380	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
312	9.077	46.972	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
313	9.054	46.974	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
314	9.018	46.979	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
315	8.959	46.967	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
316	7.902	48.392	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
317 [#]	7.950	48.394	0										
318	7.824	48.379	0	1 TFA	M548	HB FM OFF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
319	10.797	42.180	0	Cbt Train	HEMMTC (4 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
320	10.758	42.257	0	Cbt Train	HEMMTC (4 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
321	11.110	42.321	1	Cbt Train	HEMMTW	HB FM OFF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
322	10.514	42.291	4	Cbt Train	M577-AMB	HB FM OFF	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			

*Icons not considered in scenario "Heavy Brigade, Forward Maneuver Battalion, Offense"

Table C2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Offense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
323	10.517	42.409	3	Cbt Train	M577-AMB	HB FM OFF	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
324	10.448	42.294	3	Cbt Train	M577-AMB	HB FM OFF	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			
325	10.492	42.500	9	Cbt Train	M113-AMB (7 in 1 icon)	HB FM OFF	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			

#- no equivalent icon in corresponding nuclear scenario

Figure C1
Unit Layout: Standard Scale
Heavy Brigade, Forward Maneuver Battalion, Offense

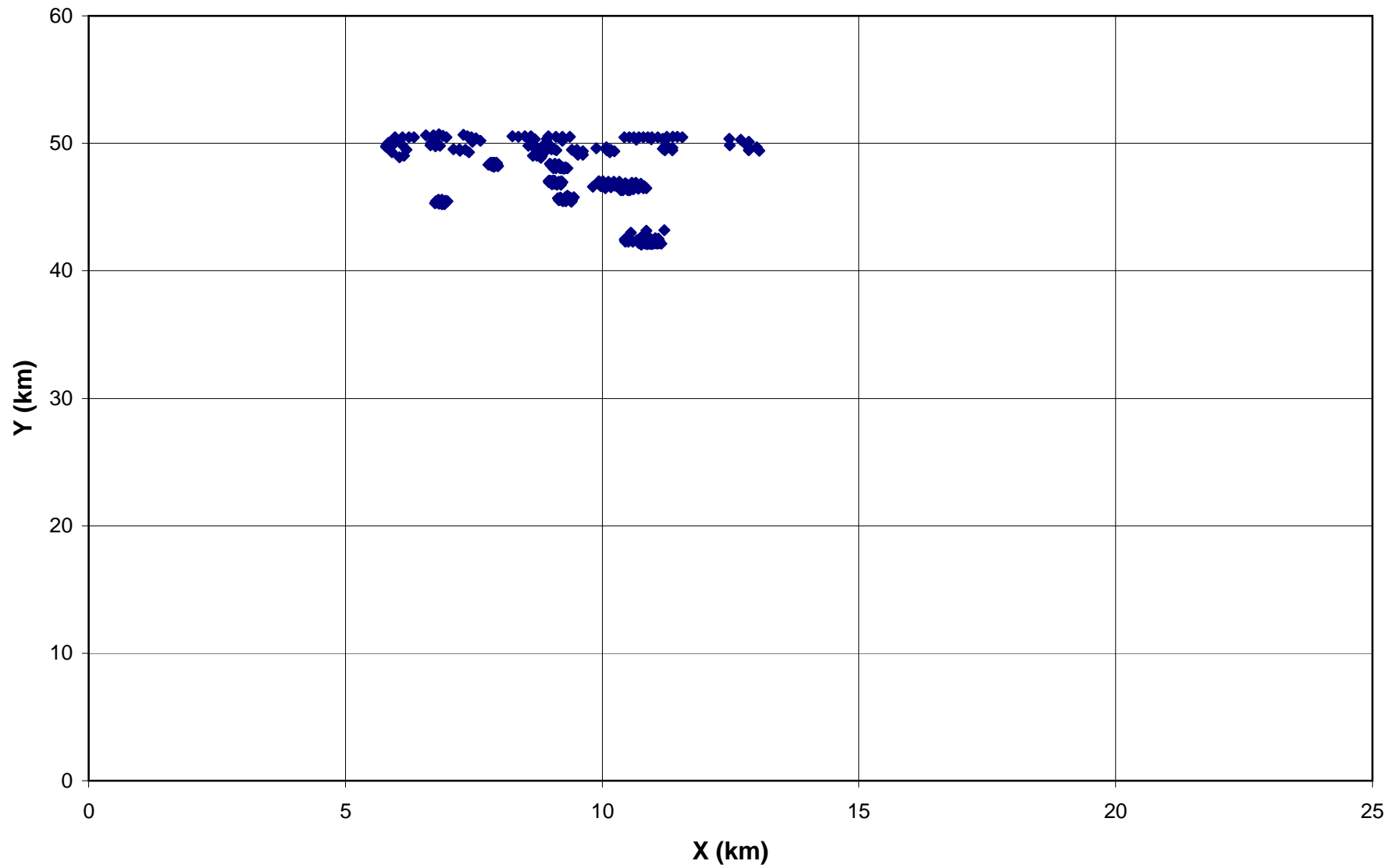


Figure C2
Unit Layout: Small Scale
Heavy Brigade, Forward Maneuver Battalion, Offense

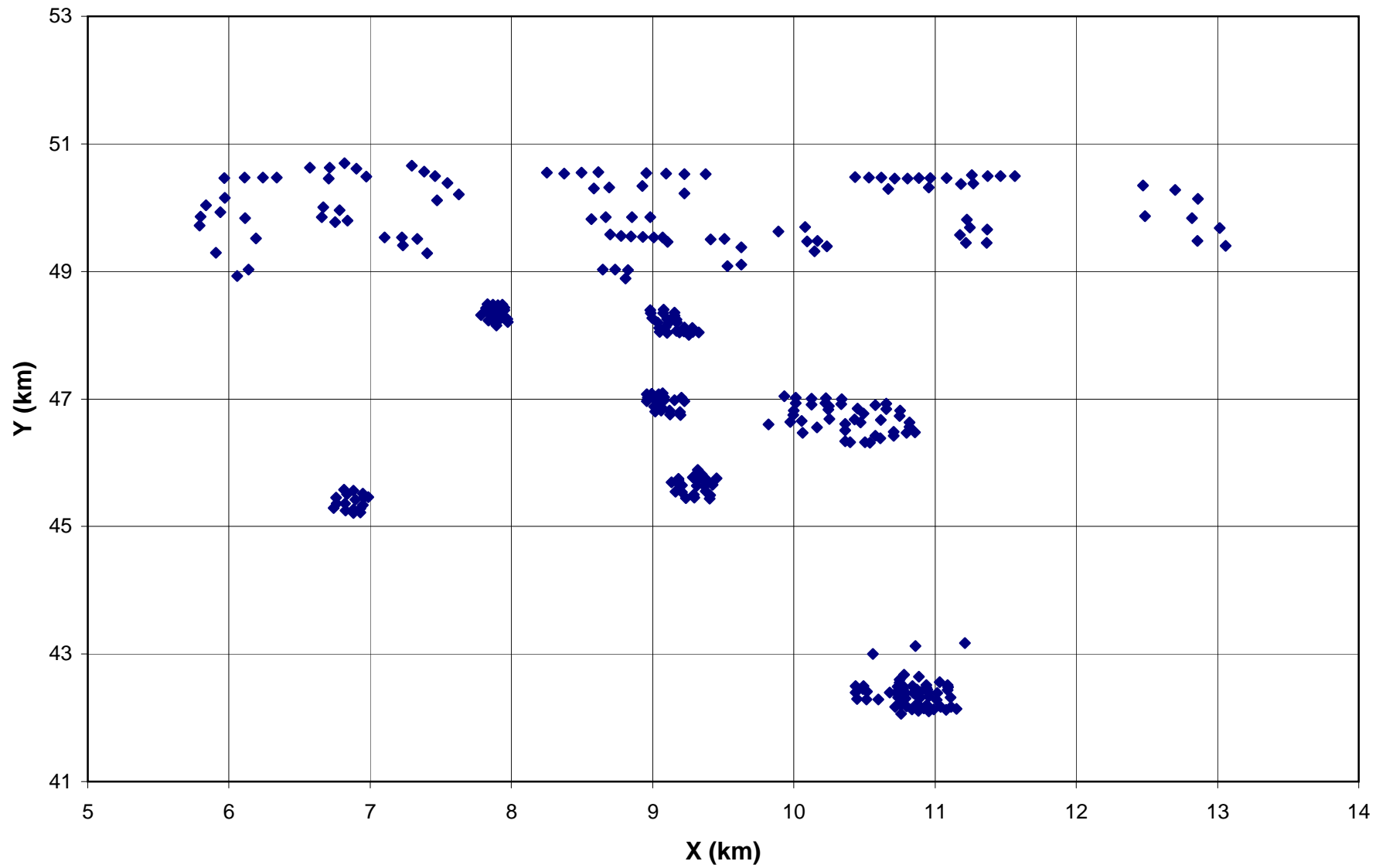


Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

Sarin (GB) 152mm Artillery
Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected*				18 rounds at aimpoint (17.60, 15.60)							
25	9.010	46.883	2	3.18E-01	0.00E+00	3.18E-01	3.18E-01	0.00E+00	1.40E-03	3.19E-01	2
195	9.046	48.117	3	2.05E-01	0.00E+00	2.05E-01	2.05E-01	0.00E+00	9.02E-04	2.06E-01	1
198	9.083	47.027	4	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
199	9.051	47.019	4	1.71E+01	0.00E+00	1.71E+01	1.71E+01	0.00E+00	7.52E-02	1.72E+01	5
200	9.013	47.028	4	2.11E+01	0.00E+00	2.11E+01	2.11E+01	0.00E+00	9.28E-02	2.12E+01	5
201	8.964	47.019	4	8.41E+00	0.00E+00	8.41E+00	8.41E+00	0.00E+00	3.70E-02	8.45E+00	4
265	9.070	47.086	5	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
266	9.042	47.071	5	2.66E+01	0.00E+00	2.66E+01	2.66E+01	0.00E+00	1.17E-01	2.67E+01	5
267	8.995	47.083	5	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
268	8.958	47.076	5	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	6.03E-02	1.38E+01	4
Case 2: Protected				18 rounds at aimpoint (9.10, 48.30)							
52	9.035	48.198	2	0.00E+00	0.00E+00	0.00E+00	1.08E+01	0.00E+00	4.75E-02	4.75E-02	1
54	9.191	48.044	2	0.00E+00	0.00E+00	0.00E+00	1.41E+02	0.00E+00	6.20E-01	6.20E-01	2
143	9.168	48.069	2	0.00E+00	0.00E+00	0.00E+00	2.59E+02	0.00E+00	1.14E+00	1.14E+00	2
145	9.077	48.397	3	1.43E+01	0.00E+00	1.43E+01	1.85E+01	0.00E+00	8.14E-02	1.44E+01	4
146	9.170	48.242	3	2.24E+02	0.00E+00	2.24E+02	3.84E+02	0.00E+00	1.69E+00	2.26E+02	8
147	9.224	48.123	3	0.00E+00	0.00E+00	0.00E+00	3.51E-01	0.00E+00	1.54E-03	1.54E-03	1
149	9.103	48.033	3	0.00E+00	0.00E+00	0.00E+00	2.85E+02	0.00E+00	1.25E+00	1.25E+00	2
150	9.155	48.357	3	3.42E+01	0.00E+00	3.42E+01	1.67E+02	0.00E+00	7.35E-01	3.49E+01	6
190	9.092	48.131	8	0.00E+00	0.00E+00	0.00E+00	4.16E+02	0.00E+00	1.83E+00	1.83E+00	2
213	9.046	48.117	3	0.00E+00	0.00E+00	0.00E+00	5.66E+01	0.00E+00	2.49E-01	2.49E-01	1
214	9.112	48.189	3	4.50E+01	0.00E+00	4.50E+01	6.82E+02	0.00E+00	3.00E+00	4.80E+01	6
233	9.076	48.344	5	2.15E+01	0.00E+00	2.15E+01	8.74E+01	0.00E+00	3.85E-01	2.19E+01	5
234	9.171	48.201	5	4.08E+00	0.00E+00	4.08E+00	3.65E+02	0.00E+00	1.61E+00	5.69E+00	3
236	9.223	48.060	5	0.00E+00	0.00E+00	0.00E+00	3.47E+00	0.00E+00	1.53E-02	1.53E-02	1
237	9.156	48.309	5	4.28E+00	0.00E+00	4.28E+00	1.99E+02	0.00E+00	8.76E-01	5.16E+00	3

Sarin (GB) MRLS

Moderate Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected* 240 rounds at aimpoint (10.80, 44.50)											
35	10.792	42.386	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
37	10.740	42.320	1	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
38	10.438	42.496	2	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3
57	10.734	42.486	1	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5
58	10.680	42.398	1	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5
59	10.841	42.495	1	2.79E+01	0.00E+00	2.79E+01	2.79E+01	0.00E+00	1.23E-01	2.80E+01	5
116	10.790	42.307	3	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
117	10.723	42.397	2	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.64E-02	2.20E+01	5
121	10.895	42.320	2	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.13E-02	1.63E+01	5
126	11.090	42.435	2	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
127	10.957	42.331	2	1.66E+01	0.00E+00	1.66E+01	1.66E+01	0.00E+00	7.30E-02	1.67E+01	5
128	10.598	42.284	2	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
142	11.013	42.282	2	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
165	10.861	43.129	4	7.16E+01	0.00E+00	7.16E+01	7.16E+01	0.00E+00	3.15E-01	7.19E+01	7
166	11.213	43.174	4	4.63E+00	0.00E+00	4.63E+00	4.63E+00	0.00E+00	2.04E-02	4.65E+00	3
167	10.559	43.004	4	3.37E+01	0.00E+00	3.37E+01	3.37E+01	0.00E+00	1.48E-01	3.38E+01	6
188	10.774	42.454	2	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
189	10.948	42.402	2	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.20E-02	2.10E+01	5
190	11.091	42.478	2	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
191	10.869	42.349	2	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
193	10.748	42.548	2	3.24E+01	0.00E+00	3.24E+01	3.24E+01	0.00E+00	1.43E-01	3.25E+01	6
207	10.758	42.201	4	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

208	10.836	42.132	4	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.60E-02	8.22E+00	4
209	10.859	42.183	4	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
210	10.939	42.475	4	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
221	10.491	42.450	5	7.03E+00	0.00E+00	7.03E+00	7.03E+00	0.00E+00	3.09E-02	7.06E+00	4
228	10.846	42.387	5	2.11E+01	0.00E+00	2.11E+01	2.11E+01	0.00E+00	9.28E-02	2.12E+01	5
229	10.955	42.100	5	5.43E+00	0.00E+00	5.43E+00	5.43E+00	0.00E+00	2.39E-02	5.45E+00	3
241	10.880	42.213	6	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
242	11.038	42.174	3	7.60E+00	0.00E+00	7.60E+00	7.60E+00	0.00E+00	3.34E-02	7.63E+00	4
243	10.759	42.060	2	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.66E-02	6.08E+00	4
244	11.077	42.122	2	4.09E+00	0.00E+00	4.09E+00	4.09E+00	0.00E+00	1.80E-02	4.11E+00	3
245	10.992	42.130	4	6.71E+00	0.00E+00	6.71E+00	6.71E+00	0.00E+00	2.95E-02	6.74E+00	4
246	10.943	42.205	4	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
247	10.922	42.146	4	7.45E+00	0.00E+00	7.45E+00	7.45E+00	0.00E+00	3.28E-02	7.48E+00	4
248	11.113	42.169	4	3.39E+00	0.00E+00	3.39E+00	3.39E+00	0.00E+00	1.49E-02	3.40E+00	3
249	10.886	42.648	1	3.67E+01	0.00E+00	3.67E+01	3.67E+01	0.00E+00	1.61E-01	3.69E+01	6
250	10.882	42.109	1	6.42E+00	0.00E+00	6.42E+00	6.42E+00	0.00E+00	2.82E-02	6.45E+00	4
251	11.151	42.140	1	1.21E+00	0.00E+00	1.21E+00	1.21E+00	0.00E+00	5.32E-03	1.22E+00	2
252	11.031	42.559	2	2.56E+01	0.00E+00	2.56E+01	2.56E+01	0.00E+00	1.13E-01	2.57E+01	5
253	10.438	42.395	2	2.37E+00	0.00E+00	2.37E+00	2.37E+00	0.00E+00	1.04E-02	2.38E+00	2
254	10.719	42.175	2	9.98E+00	0.00E+00	9.98E+00	9.98E+00	0.00E+00	4.39E-02	1.00E+01	4
255	10.749	42.595	2	3.56E+01	0.00E+00	3.56E+01	3.56E+01	0.00E+00	1.57E-01	3.58E+01	6
279	11.110	42.321	1	7.32E+00	0.00E+00	7.32E+00	7.32E+00	0.00E+00	3.22E-02	7.35E+00	4
280	10.514	42.291	4	5.60E+00	0.00E+00	5.60E+00	5.60E+00	0.00E+00	2.46E-02	5.62E+00	3
281	10.517	42.409	3	8.58E+00	0.00E+00	8.58E+00	8.58E+00	0.00E+00	3.78E-02	8.62E+00	4
282	10.448	42.294	3	2.05E+00	0.00E+00	2.05E+00	2.05E+00	0.00E+00	9.02E-03	2.06E+00	2
283	10.492	42.500	9	7.99E+00	0.00E+00	7.99E+00	7.99E+00	0.00E+00	3.52E-02	8.03E+00	4

Case 2: Protected 240 rounds at aimpoint (9.20, 48.30)

25	9.203	47.020	2	0.00E+00	0.00E+00	0.00E+00	2.47E-01	0.00E+00	1.09E-03	1.09E-03	1
51	9.325	48.044	2	2.30E+02	0.00E+00	2.30E+02	5.83E+02	0.00E+00	2.57E+00	2.33E+02	8
52	9.035	48.198	2	4.59E+02	0.00E+00	4.59E+02	1.08E+03	0.00E+00	4.75E+00	4.64E+02	8
54	9.191	48.044	2	2.43E+01	0.00E+00	2.43E+01	5.71E+02	0.00E+00	2.51E+00	2.68E+01	5
143	9.168	48.069	2	3.70E+01	0.00E+00	3.70E+01	6.79E+02	0.00E+00	2.99E+00	4.00E+01	6
144	9.281	48.111	3	1.19E+01	0.00E+00	1.19E+01	4.67E+02	0.00E+00	2.05E+00	1.40E+01	4
145	9.077	48.397	3	1.31E+02	0.00E+00	1.31E+02	7.13E+02	0.00E+00	3.14E+00	1.34E+02	8
146	9.170	48.242	3	1.70E+01	0.00E+00	1.70E+01	3.08E+02	0.00E+00	1.36E+00	1.84E+01	5
147	9.224	48.123	3	3.15E+02	0.00E+00	3.15E+02	8.08E+02	0.00E+00	3.56E+00	3.19E+02	8
149	9.103	48.033	3	4.01E+01	0.00E+00	4.01E+01	6.60E+02	0.00E+00	2.90E+00	4.30E+01	6
150	9.155	48.357	3	4.87E+00	0.00E+00	4.87E+00	2.43E+02	0.00E+00	1.07E+00	5.94E+00	3
166	8.984	48.395	3	8.51E+00	0.00E+00	8.51E+00	3.32E+02	0.00E+00	1.46E+00	9.97E+00	4
190	9.092	48.131	8	5.10E+00	0.00E+00	5.10E+00	4.14E+02	0.00E+00	1.82E+00	6.92E+00	4
204	9.256	48.008	2	2.11E+01	0.00E+00	2.11E+01	4.92E+02	0.00E+00	2.16E+00	2.33E+01	5
213	9.046	48.117	3	3.53E+02	0.00E+00	3.53E+02	1.15E+03	0.00E+00	5.06E+00	3.58E+02	8
214	9.112	48.189	3	5.38E+01	0.00E+00	5.38E+01	5.38E+02	0.00E+00	2.37E+00	5.62E+01	7
217	9.083	47.027	4	0.00E+00	0.00E+00	0.00E+00	9.61E-02	0.00E+00	4.23E-04	4.23E-04	1
218	9.051	47.019	4	0.00E+00	0.00E+00	0.00E+00	3.33E-02	0.00E+00	1.47E-04	1.47E-04	1
219	9.013	47.028	4	0.00E+00	0.00E+00	0.00E+00	9.21E-03	0.00E+00	4.05E-05	4.05E-05	1
232	9.283	48.051	5	1.61E+01	0.00E+00	1.61E+01	4.11E+02	0.00E+00	1.81E+00	1.79E+01	5
233	9.076	48.344	5	8.58E+01	0.00E+00	8.58E+01	7.38E+02	0.00E+00	3.25E+00	8.90E+01	8
234	9.171	48.201	5	2.27E+01	0.00E+00	2.27E+01	3.21E+02	0.00E+00	1.41E+00	2.41E+01	5
236	9.223	48.060	5	3.12E+02	0.00E+00	3.12E+02	8.83E+02	0.00E+00	3.89E+00	3.16E+02	8
237	9.156	48.309	5	3.00E+00	0.00E+00	3.00E+00	1.94E+02	0.00E+00	8.54E-01	3.85E+00	3
238	8.987	48.346	5	2.90E+01	0.00E+00	2.90E+01	3.77E+02	0.00E+00	1.66E+00	3.07E+01	6
297	9.070	47.086	5	0.00E+00	0.00E+00	0.00E+00	2.37E-01	0.00E+00	1.04E-03	1.04E-03	1
298	9.042	47.071	5	0.00E+00	0.00E+00	0.00E+00	9.65E-02	0.00E+00	4.25E-04	4.25E-04	1

Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	Injury Severity Category	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				720 rounds at aimpoint (8.50, 50.00)								
3	8.693	50.315	4	2.13E+02	0.00E+00	2.13E+02	2.13E+02	0.00E+00	9.37E-01	2.14E+02	8	
9	8.617	50.560	4	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5	
10	8.495	50.552	4	9.77E+00	0.00E+00	9.77E+00	9.77E+00	0.00E+00	4.30E-02	9.81E+00	4	

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

11	8.373	50.534	4	8.46E+01	0.00E+00	8.46E+01	8.46E+01	0.00E+00	3.72E-01	8.50E+01	8
12	8.250	50.547	4	4.40E+01	0.00E+00	4.40E+01	4.40E+01	0.00E+00	1.94E-01	4.42E+01	6
17	8.700	49.576	2	3.42E+02	0.00E+00	3.42E+02	3.42E+02	0.00E+00	1.50E+00	3.44E+02	8
18	9.008	49.534	2	1.71E+02	0.00E+00	1.71E+02	1.71E+02	0.00E+00	7.52E-01	1.72E+02	8
23	7.914	48.242	2	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
24	9.203	47.020	2	7.21E-02	0.00E+00	7.21E-02	7.21E-02	0.00E+00	3.17E-04	7.24E-02	1
25	9.010	46.883	2	4.09E+00	0.00E+00	4.09E+00	4.09E+00	0.00E+00	1.80E-02	4.11E+00	3
26	7.866	48.313	2	6.72E+00	0.00E+00	6.72E+00	6.72E+00	0.00E+00	2.96E-02	6.75E+00	4
27	9.155	46.980	2	5.42E-01	0.00E+00	5.42E-01	5.42E-01	0.00E+00	2.38E-03	5.44E-01	2
40	9.107	49.460	2	6.04E+00	0.00E+00	6.04E+00	6.04E+00	0.00E+00	2.66E-02	6.07E+00	4
42	9.035	48.198	2	1.97E+01	0.00E+00	1.97E+01	1.97E+01	0.00E+00	8.67E-02	1.98E+01	5
43	9.191	48.044	2	2.14E+00	0.00E+00	2.14E+00	2.14E+00	0.00E+00	9.42E-03	2.15E+00	2
84	8.568	49.822	9	4.23E+02	0.00E+00	4.23E+02	4.23E+02	0.00E+00	1.86E+00	4.25E+02	8
85	8.667	49.854	9	4.35E+02	0.00E+00	4.35E+02	4.35E+02	0.00E+00	1.91E+00	4.37E+02	8
86	8.855	49.854	4	7.61E+02	0.00E+00	7.61E+02	7.61E+02	0.00E+00	3.35E+00	7.64E+02	8
87	8.983	49.851	9	3.54E+02	0.00E+00	3.54E+02	3.54E+02	0.00E+00	1.56E+00	3.56E+02	8
113	8.809	48.886	3	1.04E+02	0.00E+00	1.04E+02	1.04E+02	0.00E+00	4.58E-01	1.04E+02	8
114	9.059	46.875	4	2.31E+00	0.00E+00	2.31E+00	2.31E+00	0.00E+00	1.02E-02	2.32E+00	2
115	7.927	48.331	4	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
122	8.845	49.551	3	4.80E+02	0.00E+00	4.80E+02	4.80E+02	0.00E+00	2.11E+00	4.82E+02	8
123	8.931	49.541	3	3.88E+02	0.00E+00	3.88E+02	3.88E+02	0.00E+00	1.71E+00	3.90E+02	8
129	9.168	48.069	2	3.40E+00	0.00E+00	3.40E+00	3.40E+00	0.00E+00	1.50E-02	3.41E+00	3
130	9.281	48.111	3	9.67E-02	0.00E+00	9.67E-02	9.67E-02	0.00E+00	4.25E-04	9.71E-02	1
131	9.077	48.397	3	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
132	9.170	48.242	3	3.51E+00	0.00E+00	3.51E+00	3.51E+00	0.00E+00	1.54E-02	3.53E+00	3
133	9.224	48.123	3	9.99E-01	0.00E+00	9.99E-01	9.99E-01	0.00E+00	4.40E-03	1.00E+00	2
134	9.103	48.033	3	8.21E+00	0.00E+00	8.21E+00	8.21E+00	0.00E+00	3.61E-02	8.25E+00	4
135	9.155	48.357	3	4.50E+00	0.00E+00	4.50E+00	4.50E+00	0.00E+00	1.98E-02	4.52E+00	3
146	9.225	46.968	2	2.07E-02	0.00E+00	2.07E-02	2.07E-02	0.00E+00	9.11E-05	2.08E-02	1
151	8.984	48.395	3	3.41E+01	0.00E+00	3.41E+01	3.41E+01	0.00E+00	1.50E-01	3.43E+01	6
172	9.092	48.131	8	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
173	9.196	46.746	2	1.00E-02	0.00E+00	1.00E-02	1.00E-02	0.00E+00	4.40E-05	1.00E-02	1
174	9.123	46.758	2	4.42E-01	0.00E+00	4.42E-01	4.42E-01	0.00E+00	1.94E-03	4.44E-01	2
175	7.974	48.204	2	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5
176	7.911	48.293	2	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
186	9.256	48.008	2	2.33E-01	0.00E+00	2.33E-01	2.33E-01	0.00E+00	1.03E-03	2.34E-01	1
192	7.880	48.198	2	7.84E+00	0.00E+00	7.84E+00	7.84E+00	0.00E+00	3.45E-02	7.87E+00	4
195	9.046	48.117	3	1.66E+01	0.00E+00	1.66E+01	1.66E+01	0.00E+00	7.30E-02	1.67E+01	5
196	9.112	48.189	3	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.63E-02	8.30E+00	4
197	9.062	46.820	4	1.75E+00	0.00E+00	1.75E+00	1.75E+00	0.00E+00	7.70E-03	1.76E+00	2
198	9.083	47.027	4	2.72E+00	0.00E+00	2.72E+00	2.72E+00	0.00E+00	1.20E-02	2.73E+00	2
199	9.051	47.019	4	3.91E+00	0.00E+00	3.91E+00	3.91E+00	0.00E+00	1.72E-02	3.93E+00	3
200	9.013	47.028	4	5.68E+00	0.00E+00	5.68E+00	5.68E+00	0.00E+00	2.50E-02	5.70E+00	3
201	8.964	47.019	4	7.66E+00	0.00E+00	7.66E+00	7.66E+00	0.00E+00	3.37E-02	7.69E+00	4
202	7.866	48.425	4	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
203	7.904	48.425	4	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
204	7.951	48.433	4	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
205	7.819	48.424	4	2.81E+00	0.00E+00	2.81E+00	2.81E+00	0.00E+00	1.24E-02	2.82E+00	2
206	7.929	48.300	4	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
213	9.283	48.051	5	8.85E-02	0.00E+00	8.85E-02	8.85E-02	0.00E+00	3.89E-04	8.89E-02	1
214	9.076	48.344	5	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
215	9.171	48.201	5	3.44E+00	0.00E+00	3.44E+00	3.44E+00	0.00E+00	1.51E-02	3.46E+00	3
217	9.223	48.060	5	1.02E+00	0.00E+00	1.02E+00	1.02E+00	0.00E+00	4.49E-03	1.02E+00	2
218	9.156	48.309	5	4.40E+00	0.00E+00	4.40E+00	4.40E+00	0.00E+00	1.94E-02	4.42E+00	3
219	8.987	48.346	5	3.21E+01	0.00E+00	3.21E+01	3.21E+01	0.00E+00	1.41E-01	3.22E+01	6
234	8.778	49.558	4	4.42E+02	0.00E+00	4.42E+02	4.42E+02	0.00E+00	1.94E+00	4.44E+02	8
236	9.070	49.530	7	3.97E+01	0.00E+00	3.97E+01	3.97E+01	0.00E+00	1.75E-01	3.99E+01	6
237	7.785	48.318	2	1.14E+00	0.00E+00	1.14E+00	1.14E+00	0.00E+00	5.02E-03	1.15E+00	2
238	7.892	48.149	2	8.76E+00	0.00E+00	8.76E+00	8.76E+00	0.00E+00	3.85E-02	8.80E+00	4
239	7.839	48.229	3	4.13E+00	0.00E+00	4.13E+00	4.13E+00	0.00E+00	1.82E-02	4.15E+00	3
240	9.121	46.815	2	6.27E-01	0.00E+00	6.27E-01	6.27E-01	0.00E+00	2.76E-03	6.30E-01	2
260	8.926	50.343	2	1.78E+02	0.00E+00	1.78E+02	1.78E+02	0.00E+00	7.83E-01	1.79E+02	8
261	7.936	48.474	5	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.88E-02	1.80E+01	5
262	7.870	48.475	5	7.40E+00	0.00E+00	7.40E+00	7.40E+00	0.00E+00	3.26E-02	7.43E+00	4
263	7.829	48.482	5	3.41E+00	0.00E+00	3.41E+00	3.41E+00	0.00E+00	1.50E-02	3.43E+00	3
264	7.905	48.473	5	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
265	9.070	47.086	5	3.72E+00	0.00E+00	3.72E+00	3.72E+00	0.00E+00	1.64E-02	3.74E+00	3
266	9.042	47.071	5	4.83E+00	0.00E+00	4.83E+00	4.83E+00	0.00E+00	2.13E-02	4.85E+00	3

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

267	8.995	47.083	5	7.23E+00	0.00E+00	7.23E+00	7.23E+00	0.00E+00	3.18E-02	7.26E+00	4
268	8.958	47.076	5	8.87E+00	0.00E+00	8.87E+00	8.87E+00	0.00E+00	3.90E-02	8.91E+00	4
272	8.733	49.028	4	1.25E+02	0.00E+00	1.25E+02	1.25E+02	0.00E+00	5.50E-01	1.26E+02	8
273	8.648	49.028	4	1.39E+02	0.00E+00	1.39E+02	1.39E+02	0.00E+00	6.12E-01	1.40E+02	8
274	8.827	49.020	4	1.23E+02	0.00E+00	1.23E+02	1.23E+02	0.00E+00	5.41E-01	1.24E+02	8
275	8.583	50.301	4	2.25E+02	0.00E+00	2.25E+02	2.25E+02	0.00E+00	9.90E-01	2.26E+02	8
Case 2: Protected 720 rounds at aimpoint (10.70, 49.90)											
22	11.177	49.570	2	6.19E+01	0.00E+00	6.19E+01	3.14E+02	0.00E+00	1.38E+00	6.33E+01	7
30	10.093	49.471	2	0.00E+00	0.00E+00	0.00E+00	2.93E+00	0.00E+00	1.29E-02	1.29E-02	1
75	10.670	50.291	3	7.84E+00	0.00E+00	7.84E+00	1.13E+02	0.00E+00	4.97E-01	8.34E+00	4
90	10.433	50.482	9	0.00E+00	0.00E+00	0.00E+00	1.83E+01	0.00E+00	8.05E-02	8.05E-02	1
91	10.532	50.469	9	1.43E+01	0.00E+00	1.43E+01	2.22E+01	0.00E+00	9.77E-02	1.44E+01	4
92	10.618	50.471	4	2.35E+01	0.00E+00	2.35E+01	5.25E+01	0.00E+00	2.31E-01	2.37E+01	5
93	10.714	50.458	9	7.32E+00	0.00E+00	7.32E+00	1.71E+01	0.00E+00	7.52E-02	7.40E+00	4
94	10.806	50.458	9	3.44E-01	0.00E+00	3.44E-01	5.78E+00	0.00E+00	2.54E-02	3.69E-01	2
95	10.886	50.463	9	2.68E+01	0.00E+00	2.68E+01	3.75E+01	0.00E+00	1.65E-01	2.70E+01	5
96	10.965	50.466	4	1.04E+01	0.00E+00	1.04E+01	3.28E+01	0.00E+00	1.44E-01	1.05E+01	4
97	11.080	50.466	9	1.36E+01	0.00E+00	1.36E+01	2.02E+01	0.00E+00	8.89E-02	1.37E+01	4
116	10.166	49.480	5	0.00E+00	0.00E+00	0.00E+00	1.36E+02	0.00E+00	5.98E-01	5.98E-01	2
117	10.234	49.391	3	5.38E+01	0.00E+00	5.38E+01	2.47E+02	0.00E+00	1.09E+00	5.49E+01	7
138	11.245	49.685	3	8.02E+00	0.00E+00	8.02E+00	1.85E+02	0.00E+00	8.14E-01	8.83E+00	4
154	11.217	49.446	4	2.34E+00	0.00E+00	2.34E+00	1.42E+02	0.00E+00	6.25E-01	2.96E+00	2
158	10.148	49.313	4	0.00E+00	0.00E+00	0.00E+00	4.86E+01	0.00E+00	2.14E-01	2.14E-01	1
159	11.226	49.815	2	1.39E+02	0.00E+00	1.39E+02	2.81E+02	0.00E+00	1.24E+00	1.40E+02	8
172	10.079	49.696	4	0.00E+00	0.00E+00	0.00E+00	3.39E-02	0.00E+00	1.49E-04	1.49E-04	1
254	11.364	49.446	4	0.00E+00	0.00E+00	0.00E+00	6.29E-02	0.00E+00	2.77E-04	2.77E-04	1
290	10.956	50.319	2	2.31E+01	0.00E+00	2.31E+01	1.73E+02	0.00E+00	7.61E-01	2.39E+01	5

Sarin (GB) 250kg Bomb
Light Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected*				2 rounds at aimpoint (10.70, 43.80)								
35	10.792	42.386	5	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.08E-02	1.62E+01	5	
37	10.740	42.320	1	7.01E+00	0.00E+00	7.01E+00	7.01E+00	0.00E+00	3.08E-02	7.04E+00	4	
57	10.734	42.486	1	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4	
58	10.680	42.398	1	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5	
59	10.841	42.495	1	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.19E-01	2.71E+01	5	
116	10.790	42.307	3	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4	
117	10.723	42.397	2	9.14E+00	0.00E+00	9.14E+00	9.14E+00	0.00E+00	4.02E-02	9.18E+00	4	
121	10.895	42.320	2	2.14E+01	0.00E+00	2.14E+01	2.14E+01	0.00E+00	9.42E-02	2.15E+01	5	
127	10.957	42.331	2	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4	
128	10.598	42.284	2	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.15E-02	2.09E+01	5	
165	10.861	43.129	4	1.14E+02	0.00E+00	1.14E+02	1.14E+02	0.00E+00	5.02E-01	1.15E+02	8	
167	10.559	43.004	4	3.79E+01	0.00E+00	3.79E+01	3.79E+01	0.00E+00	1.67E-01	3.81E+01	6	
188	10.774	42.454	2	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4	
189	10.948	42.402	2	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4	
191	10.869	42.349	2	2.37E+01	0.00E+00	2.37E+01	2.37E+01	0.00E+00	1.04E-01	2.38E+01	5	
193	10.748	42.548	2	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4	
207	10.758	42.201	4	6.29E+00	0.00E+00	6.29E+00	6.29E+00	0.00E+00	2.77E-02	6.32E+00	4	
208	10.836	42.132	4	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5	
209	10.859	42.183	4	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5	
210	10.939	42.475	4	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5	
221	10.491	42.450	5	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.87E-02	4.28E+00	3	
228	10.846	42.387	5	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5	
229	10.955	42.100	5	8.91E+00	0.00E+00	8.91E+00	8.91E+00	0.00E+00	3.92E-02	8.95E+00	4	
241	10.880	42.213	6	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5	
243	10.759	42.060	2	3.57E+00	0.00E+00	3.57E+00	3.57E+00	0.00E+00	1.57E-02	3.59E+00	3	
245	10.992	42.130	4	1.93E+00	0.00E+00	1.93E+00	1.93E+00	0.00E+00	8.49E-03	1.94E+00	2	
246	10.943	42.205	4	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4	
247	10.922	42.146	4	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4	
249	10.886	42.648	1	3.71E+01	0.00E+00	3.71E+01	3.71E+01	0.00E+00	1.63E-01	3.73E+01	6	
250	10.882	42.109	1	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.39E-02	1.69E+01	5	

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

254	10.719	42.175	2	7.79E+00	0.00E+00	7.79E+00	7.79E+00	0.00E+00	3.43E-02	7.82E+00	4
255	10.749	42.595	2	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
280	10.514	42.291	4	8.67E+00	0.00E+00	8.67E+00	8.67E+00	0.00E+00	3.81E-02	8.71E+00	4
281	10.517	42.409	3	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.88E-02	1.11E+01	4
283	10.492	42.500	9	5.38E+00	0.00E+00	5.38E+00	5.38E+00	0.00E+00	2.37E-02	5.40E+00	3
Case 2: Protected 2 rounds at aimpoint (8.90, 48.20)											
52	9.035	48.198	2	8.24E-01	0.00E+00	8.24E-01	1.13E+00	0.00E+00	4.97E-03	8.29E-01	2
149	9.103	48.033	3	0.00E+00	0.00E+00	0.00E+00	1.35E+01	0.00E+00	5.94E-02	5.94E-02	1
190	9.092	48.131	8	1.50E+01	0.00E+00	1.50E+01	7.68E+01	0.00E+00	3.38E-01	1.53E+01	5
213	9.046	48.117	3	3.55E+00	0.00E+00	3.55E+00	1.47E+02	0.00E+00	6.47E-01	4.20E+00	3
214	9.112	48.189	3	2.34E-03	0.00E+00	2.34E-03	8.33E-03	0.00E+00	3.67E-05	2.38E-03	1

Sarin (GB) 250kg Bomb
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				12 rounds at aimpont (9.00, 50.50)								
4	9.225	50.221	4	1.94E+02	0.00E+00	1.94E+02	1.94E+02	0.00E+00	8.54E-01	1.95E+02	8	
5	9.374	50.524	4	1.15E+00	0.00E+00	1.15E+00	1.15E+00	0.00E+00	5.06E-03	1.16E+00	2	
6	9.225	50.524	4	3.47E+02	0.00E+00	3.47E+02	3.47E+02	0.00E+00	1.53E+00	3.49E+02	8	
7	9.097	50.534	4	4.17E+02	0.00E+00	4.17E+02	4.17E+02	0.00E+00	1.83E+00	4.19E+02	8	
17	8.700	49.576	2	3.05E+00	0.00E+00	3.05E+00	3.05E+00	0.00E+00	1.34E-02	3.06E+00	3	
18	9.008	49.534	2	7.11E+01	0.00E+00	7.11E+01	7.11E+01	0.00E+00	3.13E-01	7.14E+01	7	
25	9.203	47.020	2	6.27E+00	0.00E+00	6.27E+00	6.27E+00	0.00E+00	2.76E-02	6.30E+00	4	
27	9.010	46.883	2	4.38E+00	0.00E+00	4.38E+00	4.38E+00	0.00E+00	1.93E-02	4.40E+00	3	
29	9.155	46.980	2	5.64E+00	0.00E+00	5.64E+00	5.64E+00	0.00E+00	2.48E-02	5.66E+00	3	
50	9.107	49.460	2	6.51E+01	0.00E+00	6.51E+01	6.51E+01	0.00E+00	2.86E-01	6.54E+01	7	
51	9.325	48.044	2	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5	
52	9.035	48.198	2	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5	
54	9.191	48.044	2	2.10E+01	0.00E+00	2.10E+01	2.10E+01	0.00E+00	9.24E-02	2.11E+01	5	
55	9.529	49.086	2	2.74E+00	0.00E+00	2.74E+00	2.74E+00	0.00E+00	1.21E-02	2.75E+00	2	
99	8.667	49.854	9	1.20E-01	0.00E+00	1.20E-01	1.20E-01	0.00E+00	5.28E-04	1.21E-01	1	
100	8.855	49.854	4	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8	
101	8.983	49.851	9	1.11E+02	0.00E+00	1.11E+02	1.11E+02	0.00E+00	4.88E-01	1.11E+02	8	
127	8.809	48.886	3	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.03E-01	2.35E+01	5	
128	9.059	46.875	4	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3	
136	8.845	49.551	3	5.99E+01	0.00E+00	5.99E+01	5.99E+01	0.00E+00	2.64E-01	6.02E+01	7	
137	8.931	49.541	3	7.13E+01	0.00E+00	7.13E+01	7.13E+01	0.00E+00	3.14E-01	7.16E+01	7	
143	9.168	48.069	2	2.18E+01	0.00E+00	2.18E+01	2.18E+01	0.00E+00	9.59E-02	2.19E+01	5	
144	9.281	48.111	3	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5	
145	9.077	48.397	3	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5	
146	9.170	48.242	3	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5	
147	9.224	48.123	3	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5	
149	9.103	48.033	3	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5	
150	9.155	48.357	3	2.75E+01	0.00E+00	2.75E+01	2.75E+01	0.00E+00	1.21E-01	2.76E+01	5	
161	9.225	46.968	2	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3	
166	8.984	48.395	3	2.72E+01	0.00E+00	2.72E+01	2.72E+01	0.00E+00	1.20E-01	2.73E+01	5	
170	9.510	49.506	4	1.20E+00	0.00E+00	1.20E+00	1.20E+00	0.00E+00	5.28E-03	1.21E+00	2	
171	9.409	49.498	4	2.84E+01	0.00E+00	2.84E+01	2.84E+01	0.00E+00	1.25E-01	2.85E+01	5	
190	9.092	48.131	8	2.32E+01	0.00E+00	2.32E+01	2.32E+01	0.00E+00	1.02E-01	2.33E+01	5	
191	9.196	46.746	2	2.29E+00	0.00E+00	2.29E+00	2.29E+00	0.00E+00	1.01E-02	2.30E+00	2	
192	9.123	46.758	2	2.61E+00	0.00E+00	2.61E+00	2.61E+00	0.00E+00	1.15E-02	2.62E+00	2	
204	9.256	48.008	2	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5	
213	9.046	48.117	3	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5	
214	9.112	48.189	3	2.43E+01	0.00E+00	2.43E+01	2.43E+01	0.00E+00	1.07E-01	2.44E+01	5	
216	9.062	46.820	4	3.54E+00	0.00E+00	3.54E+00	3.54E+00	0.00E+00	1.56E-02	3.56E+00	3	
217	9.083	47.027	4	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.81E-02	6.41E+00	4	
218	9.051	47.019	4	6.19E+00	0.00E+00	6.19E+00	6.19E+00	0.00E+00	2.72E-02	6.22E+00	4	
219	9.013	47.028	4	6.41E+00	0.00E+00	6.41E+00	6.41E+00	0.00E+00	2.82E-02	6.44E+00	4	
220	8.964	47.019	4	6.22E+00	0.00E+00	6.22E+00	6.22E+00	0.00E+00	2.74E-02	6.25E+00	4	
232	9.283	48.051	5	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.88E-02	1.80E+01	5	
233	9.076	48.344	5	2.71E+01	0.00E+00	2.71E+01	2.71E+01	0.00E+00	1.19E-01	2.72E+01	5	
234	9.171	48.201	5	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.06E-01	2.41E+01	5	

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

236	9.223	48.060	5	2.04E+01	0.00E+00	2.04E+01	2.04E+01	0.00E+00	8.98E-02	2.05E+01	5
237	9.156	48.309	5	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
238	8.987	48.346	5	2.62E+01	0.00E+00	2.62E+01	2.62E+01	0.00E+00	1.15E-01	2.63E+01	5
253	8.778	49.558	4	2.78E+01	0.00E+00	2.78E+01	2.78E+01	0.00E+00	1.22E-01	2.79E+01	5
255	9.070	49.530	7	7.09E+01	0.00E+00	7.09E+01	7.09E+01	0.00E+00	3.12E-01	7.12E+01	7
261	9.121	46.815	2	3.35E+00	0.00E+00	3.35E+00	3.35E+00	0.00E+00	1.47E-02	3.36E+00	3
291	8.926	50.343	2	4.30E+02	0.00E+00	4.30E+02	4.30E+02	0.00E+00	1.89E+00	4.32E+02	8
297	9.070	47.086	5	7.23E+00	0.00E+00	7.23E+00	7.23E+00	0.00E+00	3.18E-02	7.26E+00	4
298	9.042	47.071	5	6.91E+00	0.00E+00	6.91E+00	6.91E+00	0.00E+00	3.04E-02	6.94E+00	4
299	8.995	47.083	5	7.41E+00	0.00E+00	7.41E+00	7.41E+00	0.00E+00	3.26E-02	7.44E+00	4
300	8.958	47.076	5	6.98E+00	0.00E+00	6.98E+00	6.98E+00	0.00E+00	3.07E-02	7.01E+00	4
304	8.733	49.028	4	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
305	8.648	49.028	4	2.05E+00	0.00E+00	2.05E+00	2.05E+00	0.00E+00	9.02E-03	2.06E+00	2
306	8.827	49.020	4	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.32E-01	3.00E+01	6

Case 2: Protected 12 rounds at aimpoint (10.70, 50.70)

22	11.177	49.570	2	0.00E+00	0.00E+00	0.00E+00	6.21E+00	0.00E+00	2.73E-02	2.73E-02	1
75	10.670	50.291	3	0.00E+00	0.00E+00	0.00E+00	1.66E+02	0.00E+00	7.30E-01	7.30E-01	2
91	10.532	50.469	9	2.41E+01	0.00E+00	2.41E+01	1.45E+02	0.00E+00	6.38E-01	2.47E+01	5
92	10.618	50.471	4	1.61E+01	0.00E+00	1.61E+01	1.46E+02	0.00E+00	6.42E-01	1.67E+01	5
93	10.714	50.458	9	5.98E+00	0.00E+00	5.98E+00	1.48E+02	0.00E+00	6.51E-01	6.63E+00	4
94	10.806	50.458	9	2.48E+00	0.00E+00	2.48E+00	1.48E+02	0.00E+00	6.51E-01	3.13E+00	3
95	10.886	50.463	9	8.05E+00	0.00E+00	8.05E+00	1.46E+02	0.00E+00	6.42E-01	8.69E+00	4
96	10.965	50.466	4	2.28E+01	0.00E+00	2.28E+01	1.45E+02	0.00E+00	6.38E-01	2.34E+01	5
97	11.080	50.466	9	1.30E+01	0.00E+00	1.30E+01	5.91E+01	0.00E+00	2.60E-01	1.33E+01	4
138	11.245	49.685	3	0.00E+00	0.00E+00	0.00E+00	1.52E-01	0.00E+00	6.69E-04	6.69E-04	1
154	11.217	49.446	4	0.00E+00	0.00E+00	0.00E+00	1.84E+00	0.00E+00	8.10E-03	8.10E-03	1
159	11.226	49.815	2	0.00E+00	0.00E+00	0.00E+00	2.84E-01	0.00E+00	1.25E-03	1.25E-03	1
290	10.956	50.319	2	0.00E+00	0.00E+00	0.00E+00	1.82E+02	0.00E+00	8.01E-01	8.01E-01	2

Sarin (GB) 250kg Bomb
Heavy Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 24 rounds at aimpoint (8.90, 51.80)

3	8.693	50.315	4	4.42E+01	0.00E+00	4.42E+01	4.42E+01	0.00E+00	1.94E-01	4.44E+01	6
4	9.225	50.221	4	6.53E+01	0.00E+00	6.53E+01	6.53E+01	0.00E+00	2.87E-01	6.56E+01	7
5	9.374	50.524	4	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.12E-02	1.40E+01	4
6	9.225	50.524	4	8.76E+01	0.00E+00	8.76E+01	8.76E+01	0.00E+00	3.85E-01	8.80E+01	8
7	9.097	50.534	4	1.06E+02	0.00E+00	1.06E+02	1.06E+02	0.00E+00	4.66E-01	1.06E+02	8
8	8.954	50.542	4	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
9	8.617	50.560	4	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
10	8.495	50.552	4	1.39E-01	0.00E+00	1.39E-01	1.39E-01	0.00E+00	6.12E-04	1.40E-01	1
17	8.700	49.576	2	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.26E-01	2.87E+01	5
18	9.008	49.534	2	5.38E+01	0.00E+00	5.38E+01	5.38E+01	0.00E+00	2.37E-01	5.40E+01	7
25	9.203	47.020	2	5.81E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00	2.56E-02	5.84E+00	3
27	9.010	46.883	2	5.37E+00	0.00E+00	5.37E+00	5.37E+00	0.00E+00	2.36E-02	5.39E+00	3
29	9.155	46.980	2	6.30E+00	0.00E+00	6.30E+00	6.30E+00	0.00E+00	2.77E-02	6.33E+00	4
50	9.107	49.460	2	4.83E+01	0.00E+00	4.83E+01	4.83E+01	0.00E+00	2.13E-01	4.85E+01	6
51	9.325	48.044	2	9.76E+00	0.00E+00	9.76E+00	9.76E+00	0.00E+00	4.29E-02	9.80E+00	4
52	9.035	48.198	2	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
54	9.191	48.044	2	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5
55	9.529	49.086	2	1.67E+00	0.00E+00	1.67E+00	1.67E+00	0.00E+00	7.35E-03	1.68E+00	2
98	8.568	49.822	9	9.03E+00	0.00E+00	9.03E+00	9.03E+00	0.00E+00	3.97E-02	9.07E+00	4
99	8.667	49.854	9	2.73E+01	0.00E+00	2.73E+01	2.73E+01	0.00E+00	1.20E-01	2.74E+01	5
100	8.855	49.854	4	6.25E+01	0.00E+00	6.25E+01	6.25E+01	0.00E+00	2.75E-01	6.28E+01	7
101	8.983	49.851	9	6.69E+01	0.00E+00	6.69E+01	6.69E+01	0.00E+00	2.94E-01	6.72E+01	7
127	8.809	48.886	3	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.31E-01	2.98E+01	5
128	9.059	46.875	4	5.16E+00	0.00E+00	5.16E+00	5.16E+00	0.00E+00	2.27E-02	5.18E+00	3
136	8.845	49.551	3	4.82E+01	0.00E+00	4.82E+01	4.82E+01	0.00E+00	2.12E-01	4.84E+01	6
137	8.931	49.541	3	5.29E+01	0.00E+00	5.29E+01	5.29E+01	0.00E+00	2.33E-01	5.31E+01	7
143	9.168	48.069	2	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
144	9.281	48.111	3	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
145	9.077	48.397	3	2.72E+01	0.00E+00	2.72E+01	2.72E+01	0.00E+00	1.20E-01	2.73E+01	5

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

146	9.170	48.242	3	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.15E-02	2.09E+01	5
147	9.224	48.123	3	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.17E-02	1.64E+01	5
149	9.103	48.033	3	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.20E-02	2.10E+01	5
150	9.155	48.357	3	2.32E+01	0.00E+00	2.32E+01	2.32E+01	0.00E+00	1.02E-01	2.33E+01	5
161	9.225	46.968	2	4.84E+00	0.00E+00	4.84E+00	4.84E+00	0.00E+00	2.13E-02	4.86E+00	3
166	8.984	48.395	3	2.89E+01	0.00E+00	2.89E+01	2.89E+01	0.00E+00	1.27E-01	2.90E+01	5
170	9.510	49.506	4	2.09E+00	0.00E+00	2.09E+00	2.09E+00	0.00E+00	9.20E-03	2.10E+00	2
171	9.409	49.498	4	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
190	9.092	48.131	8	2.26E+01	0.00E+00	2.26E+01	2.26E+01	0.00E+00	9.94E-02	2.27E+01	5
191	9.196	46.746	2	3.04E+00	0.00E+00	3.04E+00	3.04E+00	0.00E+00	1.34E-02	3.05E+00	3
192	9.123	46.758	2	3.46E+00	0.00E+00	3.46E+00	3.46E+00	0.00E+00	1.52E-02	3.48E+00	3
204	9.256	48.008	2	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
213	9.046	48.117	3	2.37E+01	0.00E+00	2.37E+01	2.37E+01	0.00E+00	1.04E-01	2.38E+01	5
214	9.112	48.189	3	2.27E+01	0.00E+00	2.27E+01	2.27E+01	0.00E+00	9.99E-02	2.28E+01	5
216	9.062	46.820	4	4.41E+00	0.00E+00	4.41E+00	4.41E+00	0.00E+00	1.94E-02	4.43E+00	3
217	9.083	47.027	4	7.48E+00	0.00E+00	7.48E+00	7.48E+00	0.00E+00	3.29E-02	7.51E+00	4
218	9.051	47.019	4	7.37E+00	0.00E+00	7.37E+00	7.37E+00	0.00E+00	3.24E-02	7.40E+00	4
219	9.013	47.028	4	7.45E+00	0.00E+00	7.45E+00	7.45E+00	0.00E+00	3.28E-02	7.48E+00	4
220	8.964	47.019	4	7.35E+00	0.00E+00	7.35E+00	7.35E+00	0.00E+00	3.23E-02	7.38E+00	4
232	9.283	48.051	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
233	9.076	48.344	5	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
234	9.171	48.201	5	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
236	9.223	48.060	5	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
237	9.156	48.309	5	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.86E-02	2.25E+01	5
238	8.987	48.346	5	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5
253	8.778	49.558	4	4.05E+01	0.00E+00	4.05E+01	4.05E+01	0.00E+00	1.78E-01	4.07E+01	6
255	9.070	49.530	7	5.22E+01	0.00E+00	5.22E+01	5.22E+01	0.00E+00	2.30E-01	5.24E+01	7
261	9.121	46.815	2	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
291	8.926	50.343	2	9.12E+01	0.00E+00	9.12E+01	9.12E+01	0.00E+00	4.01E-01	9.16E+01	8
297	9.070	47.086	5	8.31E+00	0.00E+00	8.31E+00	8.31E+00	0.00E+00	3.66E-02	8.35E+00	4
298	9.042	47.071	5	8.10E+00	0.00E+00	8.10E+00	8.10E+00	0.00E+00	3.56E-02	8.14E+00	4
299	8.995	47.083	5	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.63E-02	8.30E+00	4
300	8.958	47.076	5	8.17E+00	0.00E+00	8.17E+00	8.17E+00	0.00E+00	3.59E-02	8.21E+00	4
304	8.733	49.028	4	2.49E+01	0.00E+00	2.49E+01	2.49E+01	0.00E+00	1.10E-01	2.50E+01	5
305	8.648	49.028	4	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.91E-02	1.58E+01	5
306	8.827	49.020	4	3.37E+01	0.00E+00	3.37E+01	3.37E+01	0.00E+00	1.48E-01	3.38E+01	6
307	8.583	50.301	4	9.16E+00	0.00E+00	9.16E+00	9.16E+00	0.00E+00	4.03E-02	9.20E+00	4

Case 2: Protected 24 rounds at aimpoint (10.70, 50.90)

22	11.177	49.570	2	0.00E+00	0.00E+00	0.00E+00	1.16E+01	0.00E+00	5.10E-02	5.10E-02	1
75	10.670	50.291	3	0.00E+00	0.00E+00	0.00E+00	2.61E+02	0.00E+00	1.15E+00	1.15E+00	2
90	10.433	50.482	9	0.00E+00	0.00E+00	0.00E+00	7.02E-01	0.00E+00	3.09E-03	3.09E-03	1
91	10.532	50.469	9	4.25E+01	0.00E+00	4.25E+01	2.86E+02	0.00E+00	1.26E+00	4.38E+01	6
92	10.618	50.471	4	2.39E+01	0.00E+00	2.39E+01	2.81E+02	0.00E+00	1.24E+00	2.51E+01	5
93	10.714	50.458	9	1.46E+01	0.00E+00	1.46E+01	2.74E+02	0.00E+00	1.21E+00	1.58E+01	5
94	10.806	50.458	9	6.09E+00	0.00E+00	6.09E+00	2.65E+02	0.00E+00	1.17E+00	7.26E+00	4
95	10.886	50.463	9	1.50E+01	0.00E+00	1.50E+01	2.74E+02	0.00E+00	1.21E+00	1.62E+01	5
96	10.965	50.466	4	3.70E+01	0.00E+00	3.70E+01	2.99E+02	0.00E+00	1.32E+00	3.83E+01	6
97	11.080	50.466	9	2.02E+01	0.00E+00	2.02E+01	1.46E+02	0.00E+00	6.42E-01	2.08E+01	5
138	11.245	49.685	3	0.00E+00	0.00E+00	0.00E+00	8.51E-01	0.00E+00	3.74E-03	3.74E-03	1
154	11.217	49.446	4	0.00E+00	0.00E+00	0.00E+00	3.83E+00	0.00E+00	1.69E-02	1.69E-02	1
159	11.226	49.815	2	0.00E+00	0.00E+00	0.00E+00	1.35E+00	0.00E+00	5.94E-03	5.94E-03	1
290	10.956	50.319	2	0.00E+00	0.00E+00	0.00E+00	2.87E+02	0.00E+00	1.26E+00	1.26E+00	2
310	11.183	50.374	4	0.00E+00	0.00E+00	0.00E+00	0.045383	0.00E+00	2.00E-04	2.00E-04	1

Sarin (GB) 250kg TBM
Light Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 1 round at aimpoint (9.00, 50.50)

18	9.008	49.534	2	7.84E+01	0.00E+00	7.84E+01	7.84E+01	0.00E+00	3.45E-01	7.87E+01	8
25	9.203	47.020	2	3.31E+00	0.00E+00	3.31E+00	3.31E+00	0.00E+00	1.46E-02	3.32E+00	3
27	9.010	46.883	2	4.31E+00	0.00E+00	4.31E+00	4.31E+00	0.00E+00	1.90E-02	4.33E+00	3
29	9.155	46.980	2	4.66E+00	0.00E+00	4.66E+00	4.66E+00	0.00E+00	2.05E-02	4.68E+00	3

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

50	9.107	49.460	2	1.02E+02	0.00E+00	1.02E+02	1.02E+02	0.00E+00	4.49E-01	1.02E+02	8
51	9.325	48.044	2	1.90E-05	0.00E+00	1.90E-05	1.90E-05	0.00E+00	8.36E-08	1.91E-05	1
52	9.035	48.198	2	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
54	9.191	48.044	2	9.40E+00	0.00E+00	9.40E+00	9.40E+00	0.00E+00	4.14E-02	9.44E+00	4
101	8.983	49.851	9	2.68E+01	0.00E+00	2.68E+01	2.68E+01	0.00E+00	1.18E-01	2.69E+01	5
128	9.059	46.875	4	9.00E+00	0.00E+00	9.00E+00	9.00E+00	0.00E+00	3.96E-02	9.04E+00	4
137	8.931	49.541	3	6.47E+00	0.00E+00	6.47E+00	6.47E+00	0.00E+00	2.85E-02	6.50E+00	4
143	9.168	48.069	2	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
144	9.281	48.111	3	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.62E-02	3.70E+00	3
145	9.077	48.397	3	4.23E+01	0.00E+00	4.23E+01	4.23E+01	0.00E+00	1.86E-01	4.25E+01	6
146	9.170	48.242	3	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
147	9.224	48.123	3	7.92E+00	0.00E+00	7.92E+00	7.92E+00	0.00E+00	3.48E-02	7.95E+00	4
149	9.103	48.033	3	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
150	9.155	48.357	3	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
161	9.225	46.968	2	2.24E+00	0.00E+00	2.24E+00	2.24E+00	0.00E+00	9.86E-03	2.25E+00	2
166	8.984	48.395	3	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
190	9.092	48.131	8	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.20E-02	2.10E+01	5
191	9.196	46.746	2	1.68E+00	0.00E+00	1.68E+00	1.68E+00	0.00E+00	7.39E-03	1.69E+00	2
192	9.123	46.758	2	3.67E+00	0.00E+00	3.67E+00	3.67E+00	0.00E+00	1.61E-02	3.69E+00	3
204	9.256	48.008	2	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
213	9.046	48.117	3	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
214	9.112	48.189	3	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
216	9.062	46.820	4	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
217	9.083	47.027	4	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
218	9.051	47.019	4	5.92E+00	0.00E+00	5.92E+00	5.92E+00	0.00E+00	2.60E-02	5.95E+00	3
219	9.013	47.028	4	5.27E+00	0.00E+00	5.27E+00	5.27E+00	0.00E+00	2.32E-02	5.29E+00	3
220	8.964	47.019	4	4.15E+00	0.00E+00	4.15E+00	4.15E+00	0.00E+00	1.83E-02	4.17E+00	3
232	9.283	48.051	5	3.65E+00	0.00E+00	3.65E+00	3.65E+00	0.00E+00	1.61E-02	3.67E+00	3
233	9.076	48.344	5	4.33E+01	0.00E+00	4.33E+01	4.33E+01	0.00E+00	1.91E-01	4.35E+01	6
234	9.171	48.201	5	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
236	9.223	48.060	5	7.72E+00	0.00E+00	7.72E+00	7.72E+00	0.00E+00	3.40E-02	7.75E+00	4
237	9.156	48.309	5	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
238	8.987	48.346	5	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
255	9.070	49.530	7	2.62E+02	0.00E+00	2.62E+02	2.62E+02	0.00E+00	1.15E+00	2.63E+02	8
261	9.121	46.815	2	4.02E+00	0.00E+00	4.02E+00	4.02E+00	0.00E+00	1.77E-02	4.04E+00	3
297	9.070	47.086	5	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5
298	9.042	47.071	5	5.80E+00	0.00E+00	5.80E+00	5.80E+00	0.00E+00	2.55E-02	5.83E+00	3
299	8.995	47.083	5	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
300	8.958	47.076	5	4.12E+00	0.00E+00	4.12E+00	4.12E+00	0.00E+00	1.81E-02	4.14E+00	3
306	8.827	49.020	4	9.96E-02	0.00E+00	9.96E-02	9.96E-02	0.00E+00	4.38E-04	1.00E-01	1

Case 2: Protected 1 round at aimpoint (9.30, 45.80)

15	9.347	45.818	3	8.22E+00	0.00E+00	8.22E+00	8.38E+00	0.00E+00	3.69E-02	8.26E+00	4
37	9.376	45.557	2	0.00E+00	0.00E+00	0.00E+00	3.61E+03	0.00E+00	1.59E+01	1.59E+01	5
167	9.347	45.802	3	1.23E+01	0.00E+00	1.23E+01	1.26E+01	0.00E+00	5.54E-02	1.24E+01	4
202	9.294	45.449	2	0.00E+00	0.00E+00	0.00E+00	3.81E-02	0.00E+00	1.68E-04	1.68E-04	1
203	9.405	45.436	2	0.00E+00	0.00E+00	0.00E+00	3.59E+02	0.00E+00	1.58E+00	1.58E+00	2
250	9.367	45.631	5	5.12E+00	0.00E+00	5.12E+00	4.15E+03	0.00E+00	1.83E+01	2.34E+01	5
251	9.378	45.682	5	4.86E+03	0.00E+00	4.86E+03	7.38E+03	0.00E+00	3.25E+01	4.89E+03	8
252	9.381	45.733	5	7.10E+03	0.00E+00	7.10E+03	7.99E+03	0.00E+00	3.52E+01	7.14E+03	8
286	9.424	45.654	2	4.93E-04	0.00E+00	4.93E-04	1.43E-01	0.00E+00	6.29E-04	1.12E-03	1

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 2 rounds at aimpoint (8.90, 51.80)

3	8.693	50.315	4	4.16E+01	0.00E+00	4.16E+01	4.16E+01	0.00E+00	1.83E-01	4.18E+01	6
4	9.225	50.221	4	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
5	9.374	50.524	4	1.62E+02	0.00E+00	1.62E+02	1.62E+02	0.00E+00	7.13E-01	1.63E+02	8
6	9.225	50.524	4	9.08E+00	0.00E+00	9.08E+00	9.08E+00	0.00E+00	4.00E-02	9.12E+00	4
7	9.097	50.534	4	8.61E-02	0.00E+00	8.61E-02	8.61E-02	0.00E+00	3.79E-04	8.65E-02	1
8	8.954	50.542	4	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
9	8.617	50.560	4	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

10	8.495	50.552	4	9.23E-01	0.00E+00	9.23E-01	9.23E-01	0.00E+00	4.06E-03	9.27E-01	2
15	9.347	45.818	3	4.18E+00	0.00E+00	4.18E+00	4.18E+00	0.00E+00	1.84E-02	4.20E+00	3
16	9.315	45.716	2	3.76E+00	0.00E+00	3.76E+00	3.76E+00	0.00E+00	1.65E-02	3.78E+00	3
17	8.700	49.576	2	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
18	9.008	49.534	2	7.68E+00	0.00E+00	7.68E+00	7.68E+00	0.00E+00	3.38E-02	7.71E+00	4
25	9.203	47.020	2	5.10E+00	0.00E+00	5.10E+00	5.10E+00	0.00E+00	2.24E-02	5.12E+00	3
27	9.010	46.883	2	3.81E+00	0.00E+00	3.81E+00	3.81E+00	0.00E+00	1.68E-02	3.83E+00	3
29	9.155	46.980	2	4.18E+00	0.00E+00	4.18E+00	4.18E+00	0.00E+00	1.84E-02	4.20E+00	3
32	9.162	45.542	2	1.63E+00	0.00E+00	1.63E+00	1.63E+00	0.00E+00	7.17E-03	1.64E+00	2
33	9.134	45.693	1	1.40E+00	0.00E+00	1.40E+00	1.40E+00	0.00E+00	6.16E-03	1.41E+00	2
34	9.236	45.448	2	2.55E+00	0.00E+00	2.55E+00	2.55E+00	0.00E+00	1.12E-02	2.56E+00	2
36	9.184	45.669	1	2.25E+00	0.00E+00	2.25E+00	2.25E+00	0.00E+00	9.90E-03	2.26E+00	2
37	9.376	45.557	2	3.57E+00	0.00E+00	3.57E+00	3.57E+00	0.00E+00	1.57E-02	3.59E+00	3
41	9.312	45.638	2	3.63E+00	0.00E+00	3.63E+00	3.63E+00	0.00E+00	1.60E-02	3.65E+00	3
50	9.107	49.460	2	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.66E-02	6.08E+00	4
51	9.325	48.044	2	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
52	9.035	48.198	2	7.19E+00	0.00E+00	7.19E+00	7.19E+00	0.00E+00	3.16E-02	7.22E+00	4
54	9.191	48.044	2	7.31E+00	0.00E+00	7.31E+00	7.31E+00	0.00E+00	3.22E-02	7.34E+00	4
55	9.529	49.086	2	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
56	9.628	49.104	2	7.76E+00	0.00E+00	7.76E+00	7.76E+00	0.00E+00	3.41E-02	7.79E+00	4
66	9.451	45.758	2	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
70	9.286	45.768	3	3.59E+00	0.00E+00	3.59E+00	3.59E+00	0.00E+00	1.58E-02	3.61E+00	3
98	8.568	49.822	9	9.54E+00	0.00E+00	9.54E+00	9.54E+00	0.00E+00	4.20E-02	9.58E+00	4
99	8.667	49.854	9	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.58E-02	1.96E+01	5
100	8.855	49.854	4	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
101	8.983	49.851	9	9.71E+00	0.00E+00	9.71E+00	9.71E+00	0.00E+00	4.27E-02	9.75E+00	4
124	9.209	45.648	6	2.55E+00	0.00E+00	2.55E+00	2.55E+00	0.00E+00	1.12E-02	2.56E+00	2
125	9.207	45.539	4	2.30E+00	0.00E+00	2.30E+00	2.30E+00	0.00E+00	1.01E-02	2.31E+00	2
127	8.809	48.886	3	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
128	9.059	46.875	4	4.38E+00	0.00E+00	4.38E+00	4.38E+00	0.00E+00	1.93E-02	4.40E+00	3
136	8.845	49.551	3	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
137	8.931	49.541	3	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
143	9.168	48.069	2	7.38E+00	0.00E+00	7.38E+00	7.38E+00	0.00E+00	3.25E-02	7.41E+00	4
144	9.281	48.111	3	9.61E+00	0.00E+00	9.61E+00	9.61E+00	0.00E+00	4.23E-02	9.65E+00	4
145	9.077	48.397	3	7.17E+00	0.00E+00	7.17E+00	7.17E+00	0.00E+00	3.15E-02	7.20E+00	4
146	9.170	48.242	3	7.83E+00	0.00E+00	7.83E+00	7.83E+00	0.00E+00	3.45E-02	7.86E+00	4
147	9.224	48.123	3	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.57E-02	8.16E+00	4
149	9.103	48.033	3	6.94E+00	0.00E+00	6.94E+00	6.94E+00	0.00E+00	3.05E-02	6.97E+00	4
150	9.155	48.357	3	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
161	9.225	46.968	2	5.39E+00	0.00E+00	5.39E+00	5.39E+00	0.00E+00	2.37E-02	5.41E+00	3
163	9.628	49.378	3	7.87E+00	0.00E+00	7.87E+00	7.87E+00	0.00E+00	3.46E-02	7.90E+00	4
166	8.984	48.395	3	7.22E+00	0.00E+00	7.22E+00	7.22E+00	0.00E+00	3.18E-02	7.25E+00	4
167	9.347	45.802	3	4.16E+00	0.00E+00	4.16E+00	4.16E+00	0.00E+00	1.83E-02	4.18E+00	3
170	9.510	49.506	4	1.97E+01	0.00E+00	1.97E+01	1.97E+01	0.00E+00	8.67E-02	1.98E+01	5
171	9.409	49.498	4	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.32E-01	3.00E+01	6
190	9.092	48.131	8	7.17E+00	0.00E+00	7.17E+00	7.17E+00	0.00E+00	3.15E-02	7.20E+00	4
191	9.196	46.746	2	4.49E+00	0.00E+00	4.49E+00	4.49E+00	0.00E+00	1.98E-02	4.51E+00	3
192	9.123	46.758	2	4.03E+00	0.00E+00	4.03E+00	4.03E+00	0.00E+00	1.77E-02	4.05E+00	3
200	9.182	45.726	2	2.37E+00	0.00E+00	2.37E+00	2.37E+00	0.00E+00	1.04E-02	2.38E+00	2
201	9.312	45.828	2	3.93E+00	0.00E+00	3.93E+00	3.93E+00	0.00E+00	1.73E-02	3.95E+00	3
202	9.294	45.449	2	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.38E-02	3.15E+00	3
203	9.405	45.436	2	3.29E+00	0.00E+00	3.29E+00	3.29E+00	0.00E+00	1.45E-02	3.30E+00	3
204	9.256	48.008	2	8.61E+00	0.00E+00	8.61E+00	8.61E+00	0.00E+00	3.79E-02	8.65E+00	4
213	9.046	48.117	3	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.05E-02	6.96E+00	4
214	9.112	48.189	3	7.51E+00	0.00E+00	7.51E+00	7.51E+00	0.00E+00	3.30E-02	7.54E+00	4
216	9.062	46.820	4	4.20E+00	0.00E+00	4.20E+00	4.20E+00	0.00E+00	1.85E-02	4.22E+00	3
217	9.083	47.027	4	4.95E+00	0.00E+00	4.95E+00	4.95E+00	0.00E+00	2.18E-02	4.97E+00	3
218	9.051	47.019	4	4.89E+00	0.00E+00	4.89E+00	4.89E+00	0.00E+00	2.15E-02	4.91E+00	3
219	9.013	47.028	4	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.87E-02	4.28E+00	3
220	8.964	47.019	4	4.34E+00	0.00E+00	4.34E+00	4.34E+00	0.00E+00	1.91E-02	4.36E+00	3
232	9.283	48.051	5	9.36E+00	0.00E+00	9.36E+00	9.36E+00	0.00E+00	4.12E-02	9.40E+00	4
233	9.076	48.344	5	7.21E+00	0.00E+00	7.21E+00	7.21E+00	0.00E+00	3.17E-02	7.24E+00	4
234	9.171	48.201	5	7.79E+00	0.00E+00	7.79E+00	7.79E+00	0.00E+00	3.43E-02	7.82E+00	4
236	9.223	48.060	5	7.95E+00	0.00E+00	7.95E+00	7.95E+00	0.00E+00	3.50E-02	7.98E+00	4
237	9.156	48.309	5	7.88E+00	0.00E+00	7.88E+00	7.88E+00	0.00E+00	3.47E-02	7.91E+00	4
238	8.987	48.346	5	7.15E+00	0.00E+00	7.15E+00	7.15E+00	0.00E+00	3.15E-02	7.18E+00	4
250	9.367	45.631	5	3.75E+00	0.00E+00	3.75E+00	3.75E+00	0.00E+00	1.65E-02	3.77E+00	3
251	9.378	45.682	5	3.90E+00	0.00E+00	3.90E+00	3.90E+00	0.00E+00	1.72E-02	3.92E+00	3

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

252	9.381	45.733	5	4.03E+00	0.00E+00	4.03E+00	4.03E+00	0.00E+00	1.77E-02	4.05E+00	3
253	8.778	49.558	4	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
255	9.070	49.530	7	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
261	9.121	46.815	2	4.21E+00	0.00E+00	4.21E+00	4.21E+00	0.00E+00	1.85E-02	4.23E+00	3
286	9.424	45.654	2	3.82E+00	0.00E+00	3.82E+00	3.82E+00	0.00E+00	1.68E-02	3.84E+00	3
291	8.926	50.343	2	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5
297	9.070	47.086	5	5.09E+00	0.00E+00	5.09E+00	5.09E+00	0.00E+00	2.24E-02	5.11E+00	3
298	9.042	47.071	5	4.89E+00	0.00E+00	4.89E+00	4.89E+00	0.00E+00	2.15E-02	4.91E+00	3
299	8.995	47.083	5	4.22E+00	0.00E+00	4.22E+00	4.22E+00	0.00E+00	1.86E-02	4.24E+00	3
300	8.958	47.076	5	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.01E-02	4.58E+00	3
304	8.733	49.028	4	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
305	8.648	49.028	4	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
306	8.827	49.020	4	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
307	8.583	50.301	4	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
Case 2: Protected 2 rounds at aimpoint (12.60, 49.70)											
120	13.056	49.401	5	1.86E+01	0.00E+00	1.86E+01	9.34E+02	0.00E+00	4.11E+00	2.27E+01	5
186	12.487	49.863	3	2.50E-01	0.00E+00	2.50E-01	2.69E+02	0.00E+00	1.18E+00	1.43E+00	2

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				4 rounds at aimpoint (8.80, 53.90)								
3	8.693	50.315	4	9.61E+00	0.00E+00	9.61E+00	9.61E+00	0.00E+00	4.23E-02	9.65E+00	4	
4	9.225	50.221	4	2.54E+01	0.00E+00	2.54E+01	2.54E+01	0.00E+00	1.12E-01	2.55E+01	5	
5	9.374	50.524	4	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.33E-02	2.13E+01	5	
6	9.225	50.524	4	2.89E+01	0.00E+00	2.89E+01	2.89E+01	0.00E+00	1.27E-01	2.90E+01	5	
7	9.097	50.534	4	2.96E+01	0.00E+00	2.96E+01	2.96E+01	0.00E+00	1.30E-01	2.97E+01	5	
8	8.954	50.542	4	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5	
9	8.617	50.560	4	8.75E+00	0.00E+00	8.75E+00	8.75E+00	0.00E+00	3.85E-02	8.79E+00	4	
10	8.495	50.552	4	6.52E+00	0.00E+00	6.52E+00	6.52E+00	0.00E+00	2.87E-02	6.55E+00	4	
11	8.373	50.534	4	3.63E+00	0.00E+00	3.63E+00	3.63E+00	0.00E+00	1.60E-02	3.65E+00	3	
12	8.250	50.547	4	1.40E+00	0.00E+00	1.40E+00	1.40E+00	0.00E+00	6.16E-03	1.41E+00	2	
15	9.347	45.818	3	4.85E+00	0.00E+00	4.85E+00	4.85E+00	0.00E+00	2.13E-02	4.87E+00	3	
16	9.315	45.716	2	4.95E+00	0.00E+00	4.95E+00	4.95E+00	0.00E+00	2.18E-02	4.97E+00	3	
17	8.700	49.576	2	8.22E+00	0.00E+00	8.22E+00	8.22E+00	0.00E+00	3.62E-02	8.26E+00	4	
18	9.008	49.534	2	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5	
25	9.203	47.020	2	8.78E+00	0.00E+00	8.78E+00	8.78E+00	0.00E+00	3.86E-02	8.82E+00	4	
27	9.010	46.883	2	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.63E-02	8.30E+00	4	
29	9.155	46.980	2	8.51E+00	0.00E+00	8.51E+00	8.51E+00	0.00E+00	3.74E-02	8.55E+00	4	
32	9.162	45.542	2	4.98E+00	0.00E+00	4.98E+00	4.98E+00	0.00E+00	2.19E-02	5.00E+00	3	
33	9.134	45.693	1	5.24E+00	0.00E+00	5.24E+00	5.24E+00	0.00E+00	2.31E-02	5.26E+00	3	
34	9.236	45.448	2	4.77E+00	0.00E+00	4.77E+00	4.77E+00	0.00E+00	2.10E-02	4.79E+00	3	
36	9.184	45.669	1	5.29E+00	0.00E+00	5.29E+00	5.29E+00	0.00E+00	2.33E-02	5.31E+00	3	
37	9.376	45.557	2	4.02E+00	0.00E+00	4.02E+00	4.02E+00	0.00E+00	1.77E-02	4.04E+00	3	
41	9.312	45.638	2	4.79E+00	0.00E+00	4.79E+00	4.79E+00	0.00E+00	2.11E-02	4.81E+00	3	
50	9.107	49.460	2	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5	
51	9.325	48.044	2	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4	
52	9.035	48.198	2	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4	
54	9.191	48.044	2	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4	
55	9.529	49.086	2	8.14E+00	0.00E+00	8.14E+00	8.14E+00	0.00E+00	3.58E-02	8.18E+00	4	
56	9.628	49.104	2	4.36E+00	0.00E+00	4.36E+00	4.36E+00	0.00E+00	1.92E-02	4.38E+00	3	
66	9.451	45.758	2	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.43E-02	3.26E+00	3	
70	9.286	45.768	3	5.25E+00	0.00E+00	5.25E+00	5.25E+00	0.00E+00	2.31E-02	5.27E+00	3	
98	8.568	49.822	9	6.11E+00	0.00E+00	6.11E+00	6.11E+00	0.00E+00	2.69E-02	6.14E+00	4	
99	8.667	49.854	9	8.30E+00	0.00E+00	8.30E+00	8.30E+00	0.00E+00	3.65E-02	8.34E+00	4	
100	8.855	49.854	4	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4	
101	8.983	49.851	9	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.62E-02	1.97E+01	5	
124	9.209	45.648	6	5.27E+00	0.00E+00	5.27E+00	5.27E+00	0.00E+00	2.32E-02	5.29E+00	3	
125	9.207	45.539	4	5.14E+00	0.00E+00	5.14E+00	5.14E+00	0.00E+00	2.26E-02	5.16E+00	3	
127	8.809	48.886	3	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4	
128	9.059	46.875	4	8.43E+00	0.00E+00	8.43E+00	8.43E+00	0.00E+00	3.71E-02	8.47E+00	4	
136	8.845	49.551	3	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4	

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

137	8.931	49.541	3	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.13E-02	1.63E+01	5
143	9.168	48.069	2	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
144	9.281	48.111	3	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
145	9.077	48.397	3	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
146	9.170	48.242	3	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
147	9.224	48.123	3	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
149	9.103	48.033	3	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
150	9.155	48.357	3	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	6.03E-02	1.38E+01	4
161	9.225	46.968	2	8.57E+00	0.00E+00	8.57E+00	8.57E+00	0.00E+00	3.77E-02	8.61E+00	4
163	9.628	49.378	3	4.52E+00	0.00E+00	4.52E+00	4.52E+00	0.00E+00	1.99E-02	4.54E+00	3
166	8.984	48.395	3	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
167	9.347	45.802	3	4.82E+00	0.00E+00	4.82E+00	4.82E+00	0.00E+00	2.12E-02	4.84E+00	3
170	9.510	49.506	4	9.54E+00	0.00E+00	9.54E+00	9.54E+00	0.00E+00	4.20E-02	9.58E+00	4
171	9.409	49.498	4	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
190	9.092	48.131	8	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
191	9.196	46.746	2	8.00E+00	0.00E+00	8.00E+00	8.00E+00	0.00E+00	3.52E-02	8.04E+00	4
192	9.123	46.758	2	7.75E+00	0.00E+00	7.75E+00	7.75E+00	0.00E+00	3.41E-02	7.78E+00	4
200	9.182	45.726	2	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
201	9.312	45.828	2	5.18E+00	0.00E+00	5.18E+00	5.18E+00	0.00E+00	2.28E-02	5.20E+00	3
202	9.294	45.449	2	4.40E+00	0.00E+00	4.40E+00	4.40E+00	0.00E+00	1.94E-02	4.42E+00	3
203	9.405	45.436	2	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3
204	9.256	48.008	2	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
213	9.046	48.117	3	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
214	9.112	48.189	3	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
216	9.062	46.820	4	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.60E-02	8.22E+00	4
217	9.083	47.027	4	8.77E+00	0.00E+00	8.77E+00	8.77E+00	0.00E+00	3.86E-02	8.81E+00	4
218	9.051	47.019	4	8.96E+00	0.00E+00	8.96E+00	8.96E+00	0.00E+00	3.94E-02	9.00E+00	4
219	9.013	47.028	4	8.70E+00	0.00E+00	8.70E+00	8.70E+00	0.00E+00	3.83E-02	8.74E+00	4
220	8.964	47.019	4	8.32E+00	0.00E+00	8.32E+00	8.32E+00	0.00E+00	3.66E-02	8.36E+00	4
232	9.283	48.051	5	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
233	9.076	48.344	5	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	6.03E-02	1.38E+01	4
234	9.171	48.201	5	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
236	9.223	48.060	5	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
237	9.156	48.309	5	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
238	8.987	48.346	5	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
250	9.367	45.631	5	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.87E-02	4.28E+00	3
251	9.378	45.682	5	4.23E+00	0.00E+00	4.23E+00	4.23E+00	0.00E+00	1.86E-02	4.25E+00	3
252	9.381	45.733	5	4.29E+00	0.00E+00	4.29E+00	4.29E+00	0.00E+00	1.89E-02	4.31E+00	3
253	8.778	49.558	4	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
255	9.070	49.530	7	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
261	9.121	46.815	2	7.91E+00	0.00E+00	7.91E+00	7.91E+00	0.00E+00	3.48E-02	7.94E+00	4
286	9.424	45.654	2	3.44E+00	0.00E+00	3.44E+00	3.44E+00	0.00E+00	1.51E-02	3.46E+00	3
291	8.926	50.343	2	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.62E-02	1.97E+01	5
297	9.070	47.086	5	9.06E+00	0.00E+00	9.06E+00	9.06E+00	0.00E+00	3.99E-02	9.10E+00	4
298	9.042	47.071	5	9.05E+00	0.00E+00	9.05E+00	9.05E+00	0.00E+00	3.98E-02	9.09E+00	4
299	8.995	47.083	5	8.72E+00	0.00E+00	8.72E+00	8.72E+00	0.00E+00	3.84E-02	8.76E+00	4
300	8.958	47.076	5	8.53E+00	0.00E+00	8.53E+00	8.53E+00	0.00E+00	3.75E-02	8.57E+00	4
304	8.733	49.028	4	8.23E+00	0.00E+00	8.23E+00	8.23E+00	0.00E+00	3.62E-02	8.27E+00	4
305	8.648	49.028	4	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.84E-02	6.49E+00	4
306	8.827	49.020	4	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
307	8.583	50.301	4	7.34E+00	0.00E+00	7.34E+00	7.34E+00	0.00E+00	3.23E-02	7.37E+00	4

Case 2: Protected 4 rounds at aimpoint (8.00, 48.30)

23	7.914	48.242	2	0.00E+00	0.00E+00	0.00E+00	6.51E+02	0.00E+00	2.86E+00	2.86E+00	2
28	7.866	48.313	2	0.00E+00	0.00E+00	0.00E+00	6.06E+02	0.00E+00	2.67E+00	2.67E+00	2
129	7.927	48.331	4	0.00E+00	0.00E+00	0.00E+00	3.29E+02	0.00E+00	1.45E+00	1.45E+00	2
193	7.974	48.204	2	0.00E+00	0.00E+00	0.00E+00	4.27E-01	0.00E+00	1.88E-03	1.88E-03	1
194	7.911	48.293	2	0.00E+00	0.00E+00	0.00E+00	6.81E+02	0.00E+00	3.00E+00	3.00E+00	2
210	7.880	48.198	2	0.00E+00	0.00E+00	0.00E+00	8.51E+02	0.00E+00	3.74E+00	3.74E+00	3
221	7.866	48.425	4	4.59E+00	0.00E+00	4.59E+00	1.76E+02	0.00E+00	7.74E-01	5.36E+00	3
222	7.904	48.425	4	9.84E+00	0.00E+00	9.84E+00	2.70E+02	0.00E+00	1.19E+00	1.10E+01	4
224	7.819	48.424	4	6.25E-01	0.00E+00	6.25E-01	4.66E+01	0.00E+00	2.05E-01	8.30E-01	2
225	7.929	48.300	4	0.00E+00	0.00E+00	0.00E+00	3.65E+02	0.00E+00	1.61E+00	1.61E+00	2
258	7.892	48.149	2	0.00E+00	0.00E+00	0.00E+00	8.33E+02	0.00E+00	3.67E+00	3.67E+00	3
259	7.839	48.229	3	0.00E+00	0.00E+00	0.00E+00	5.37E+02	0.00E+00	2.36E+00	2.36E+00	2
293	7.936	48.474	5	8.87E+00	0.00E+00	8.87E+00	3.63E+01	0.00E+00	1.60E-01	9.03E+00	4
294	7.870	48.475	5	1.59E+01	0.00E+00	1.59E+01	7.74E+01	0.00E+00	3.41E-01	1.62E+01	5
295	7.829	48.482	5	3.26E+00	0.00E+00	3.26E+00	1.99E+01	0.00E+00	8.76E-02	3.35E+00	3
296	7.905	48.473	5	2.81E+01	0.00E+00	2.81E+01	1.20E+02	0.00E+00	5.28E-01	2.86E+01	5

*Grid Position numbers (given) do not correspond to Icon numbers for this scenario.

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

VX 152mm Artillery
Light Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				18 rounds at aimpoint (10.90, 43.55)								
40	10.792	42.386	5	1.03E-01	1.01E+00	1.44E-01	1.03E-01	1.01E+00	7.21E+00	7.36E+00	4	
43	10.740	42.320	1	5.57E-03	1.61E-01	7.80E-03	5.57E-03	1.61E-01	1.13E+00	1.14E+00	2	
71	10.734	42.486	1	5.82E-03	2.23E-01	8.15E-03	5.82E-03	2.23E-01	1.57E+00	1.58E+00	2	
73	10.841	42.495	1	3.46E-01	3.59E+00	4.84E-01	3.46E-01	3.59E+00	2.56E+01	2.61E+01	5	
130	10.790	42.307	3	7.65E-02	7.24E-01	1.07E-01	7.65E-02	7.24E-01	5.18E+00	5.28E+00	3	
131	10.723	42.397	2	1.64E-03	0.00E+00	2.30E-03	1.64E-03	0.00E+00	2.30E-03	4.59E-03	1	
135	10.895	42.320	2	3.57E-01	3.24E+00	5.00E-01	3.57E-01	3.24E+00	2.32E+01	2.37E+01	5	
140	11.090	42.435	2	3.54E-02	4.73E-01	4.96E-02	3.54E-02	4.73E-01	3.36E+00	3.41E+00	3	
141	10.957	42.331	2	3.65E-01	3.35E+00	5.11E-01	3.65E-01	3.35E+00	2.40E+01	2.45E+01	5	
157	11.013	42.282	2	1.88E-01	1.62E+00	2.63E-01	1.88E-01	1.62E+00	1.16E+01	1.19E+01	4	
180	10.861	43.129	4	5.22E+00	8.43E+01	7.31E+00	5.22E+00	8.43E+01	5.97E+02	6.05E+02	8	
206	10.774	42.454	2	6.87E-02	7.91E-01	9.62E-02	6.87E-02	7.91E-01	5.63E+00	5.73E+00	3	
207	10.948	42.402	2	4.47E-01	4.41E+00	6.26E-01	4.47E-01	4.41E+00	3.15E+01	3.21E+01	6	
208	11.091	42.478	2	3.92E-02	5.23E-01	5.49E-02	3.92E-02	5.23E-01	3.72E+00	3.77E+00	3	
209	10.869	42.349	2	3.24E-01	3.03E+00	4.54E-01	3.24E-01	3.03E+00	2.17E+01	2.21E+01	5	
211	10.748	42.548	2	3.18E-02	4.42E-01	4.45E-02	3.18E-02	4.42E-01	3.14E+00	3.18E+00	3	
226	10.758	42.201	4	5.75E-03	9.81E-02	8.05E-03	5.75E-03	9.81E-02	6.95E-01	7.03E-01	2	
227	10.836	42.132	4	9.20E-02	4.24E-01	1.29E-01	9.20E-02	4.24E-01	3.10E+00	3.23E+00	3	
228	10.859	42.183	4	1.74E-01	1.07E+00	2.44E-01	1.74E-01	1.07E+00	7.73E+00	7.98E+00	4	
229	10.939	42.475	4	5.75E-01	5.90E+00	8.05E-01	5.75E-01	5.90E+00	4.21E+01	4.29E+01	6	
247	10.846	42.387	5	2.78E-01	2.68E+00	3.89E-01	2.78E-01	2.68E+00	1.91E+01	1.95E+01	5	
248	10.955	42.100	5	1.61E-01	4.94E-01	2.25E-01	1.61E-01	4.94E-01	3.68E+00	3.91E+00	3	
264	10.880	42.213	6	2.34E-01	1.67E+00	3.28E-01	2.34E-01	1.67E+00	1.20E+01	1.23E+01	4	
265	11.038	42.174	3	8.05E-02	5.00E-01	1.13E-01	8.05E-02	5.00E-01	3.61E+00	3.73E+00	3	
269	10.759	42.060	2	1.41E-03	0.00E+00	1.97E-03	1.41E-03	0.00E+00	1.97E-03	3.95E-03	1	
270	11.077	42.122	2	6.26E-03	4.47E-02	8.76E-03	6.26E-03	4.47E-02	3.22E-01	3.30E-01	2	
273	10.992	42.130	4	1.28E-01	5.92E-01	1.79E-01	1.28E-01	5.92E-01	4.32E+00	4.50E+00	3	
274	10.943	42.205	4	2.53E-01	1.78E+00	3.54E-01	2.53E-01	1.78E+00	1.28E+01	1.32E+01	4	
275	10.922	42.146	4	2.06E-01	1.03E+00	2.88E-01	2.06E-01	1.03E+00	7.50E+00	7.79E+00	4	
276	11.113	42.169	4	7.28E-04	0.00E+00	1.02E-03	7.28E-04	0.00E+00	1.02E-03	2.04E-03	1	
277	10.886	42.648	1	1.01E+00	1.13E+01	1.41E+00	1.01E+00	1.13E+01	8.05E+01	8.19E+01	8	
278	10.882	42.109	1	1.48E-01	5.25E-01	2.07E-01	1.48E-01	5.25E-01	3.88E+00	4.09E+00	3	
280	11.031	42.559	2	2.93E-01	3.18E+00	4.10E-01	2.93E-01	3.18E+00	2.27E+01	2.31E+01	5	
282	10.719	42.175	2	1.71E-07	0.00E+00	2.39E-07	1.71E-07	0.00E+00	2.39E-07	4.79E-07	1	
284	10.749	42.595	2	3.83E-02	5.47E-01	5.36E-02	3.83E-02	5.47E-01	3.88E+00	3.94E+00	3	
321	11.110	42.321	1	4.72E-03	1.60E-01	6.61E-03	4.72E-03	1.60E-01	1.13E+00	1.13E+00	2	
Case 2: Protected				18 rounds at aimpoint (10.90, 43.55)								
40	10.792	42.386	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-01	6.61E+00	6.61E+00	4	
43	10.740	42.320	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-01	1.05E+00	1.05E+00	2	
71	10.734	42.486	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-01	1.45E+00	1.45E+00	2	
73	10.841	42.495	1	0.00E+00	0.00E+00	0.00E+00	4.40E-04	3.33E+00	2.33E+01	2.33E+01	5	
130	10.790	42.307	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-01	4.71E+00	4.71E+00	3	
135	10.895	42.320	2	0.00E+00	0.00E+00	0.00E+00	4.59E-04	3.01E+00	2.11E+01	2.11E+01	5	
140	11.090	42.435	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-01	3.08E+00	3.08E+00	3	
141	10.957	42.331	2	0.00E+00	0.00E+00	0.00E+00	4.70E-04	3.12E+00	2.18E+01	2.18E+01	5	
157	11.013	42.282	2	0.00E+00	0.00E+00	0.00E+00	6.86E-08	1.51E+00	1.06E+01	1.06E+01	4	
180	10.861	43.129	4	8.49E-02	2.81E+01	1.19E-01	2.62E-01	8.03E+01	5.62E+02	5.63E+02	8	
206	10.774	42.454	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-01	5.15E+00	5.15E+00	3	
207	10.948	42.402	2	0.00E+00	0.00E+00	0.00E+00	4.40E-04	4.10E+00	2.87E+01	2.87E+01	5	
208	11.091	42.478	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-01	3.40E+00	3.40E+00	3	
209	10.869	42.349	2	0.00E+00	0.00E+00	0.00E+00	4.20E-04	2.81E+00	1.97E+01	1.97E+01	5	
211	10.748	42.548	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-01	2.88E+00	2.88E+00	2	
226	10.758	42.201	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-02	6.39E-01	6.39E-01	2	
227	10.836	42.132	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-01	2.76E+00	2.76E+00	2	
228	10.859	42.183	4	0.00E+00	0.00E+00	0.00E+00	5.30E-08	9.92E-01	6.94E+00	6.94E+00	4	
229	10.939	42.475	4	0.00E+00	0.00E+00	0.00E+00	9.32E-04	5.49E+00	3.84E+01	3.84E+01	6	
247	10.846	42.387	5	0.00E+00	0.00E+00	0.00E+00	3.72E-04	2.50E+00	1.75E+01	1.75E+01	5	
248	10.955	42.100	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-01	3.22E+00	3.22E+00	3	
264	10.880	42.213	6	0.00E+00	0.00E+00	0.00E+00	9.51E-05	1.55E+00	1.09E+01	1.09E+01	4	

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

265	11.038	42.174	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-01	3.26E+00	3.26E+00	3
270	11.077	42.122	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-02	2.91E-01	2.91E-01	2
273	10.992	42.130	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-01	3.85E+00	3.85E+00	3
274	10.943	42.205	4	0.00E+00	0.00E+00	0.00E+00	3.49E-04	1.65E+00	1.16E+01	1.16E+01	4
275	10.922	42.146	4	0.00E+00	0.00E+00	0.00E+00	1.09E-07	9.60E-01	6.72E+00	6.72E+00	4
277	10.886	42.648	1	0.00E+00	0.00E+00	0.00E+00	2.05E-03	1.05E+01	7.35E+01	7.35E+01	7
278	10.882	42.109	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-01	3.42E+00	3.42E+00	3
280	11.031	42.559	2	0.00E+00	0.00E+00	0.00E+00	4.37E-04	2.96E+00	2.07E+01	2.07E+01	5
284	10.749	42.595	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-01	3.56E+00	3.56E+00	3
321	11.110	42.321	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-01	1.04E+00	1.04E+00	2

VX MRLS
Moderate Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 240 rounds at aimpoint (10.75, 43.80)											
40	10.792	42.386	5	2.13E+00	3.47E+00	2.98E+00	2.13E+00	3.47E+00	2.73E+01	3.03E+01	6
43	10.740	42.320	1	2.13E+00	2.96E+00	2.98E+00	2.13E+00	2.96E+00	2.37E+01	2.67E+01	5
44	10.438	42.496	2	6.07E-01	1.08E+00	8.50E-01	6.07E-01	1.08E+00	8.41E+00	9.26E+00	4
71	10.734	42.486	1	2.92E+00	7.73E+00	4.09E+00	2.92E+00	7.73E+00	5.82E+01	6.23E+01	7
72	10.680	42.398	1	2.35E+00	4.10E+00	3.29E+00	2.35E+00	4.10E+00	3.20E+01	3.53E+01	6
73	10.841	42.495	1	2.33E+00	5.10E+00	3.26E+00	2.33E+00	5.10E+00	3.90E+01	4.22E+01	6
130	10.790	42.307	3	1.87E+00	2.28E+00	2.62E+00	1.87E+00	2.28E+00	1.86E+01	2.12E+01	5
131	10.723	42.397	2	2.43E+00	4.52E+00	3.40E+00	2.43E+00	4.52E+00	3.50E+01	3.84E+01	6
135	10.895	42.320	2	1.81E+00	2.24E+00	2.53E+00	1.81E+00	2.24E+00	1.82E+01	2.07E+01	5
140	11.090	42.435	2	5.24E-01	6.89E-01	7.34E-01	5.24E-01	6.89E-01	5.56E+00	6.29E+00	4
141	10.957	42.331	2	1.83E+00	2.39E+00	2.56E+00	1.83E+00	2.39E+00	1.93E+01	2.19E+01	5
142	10.598	42.284	2	1.56E+00	1.58E+00	2.18E+00	1.56E+00	1.58E+00	1.32E+01	1.54E+01	5
157	11.013	42.282	2	1.26E+00	1.25E+00	1.76E+00	1.26E+00	1.25E+00	1.05E+01	1.23E+01	4
180	10.861	43.129	4	3.34E+01	4.48E+02	4.68E+01	3.34E+01	4.48E+02	3.18E+03	3.23E+03	8
182	10.559	43.004	4	1.51E+01	7.96E+01	2.11E+01	1.51E+01	7.96E+01	5.78E+02	5.99E+02	8
206	10.774	42.454	2	2.56E+00	5.64E+00	3.58E+00	2.56E+00	5.64E+00	4.31E+01	4.66E+01	6
207	10.948	42.402	2	2.12E+00	3.61E+00	2.97E+00	2.12E+00	3.61E+00	2.82E+01	3.12E+01	6
208	11.091	42.478	2	5.43E-01	8.37E-01	7.60E-01	5.43E-01	8.37E-01	6.62E+00	7.38E+00	4
209	10.869	42.349	2	1.84E+00	2.40E+00	2.58E+00	1.84E+00	2.40E+00	1.94E+01	2.20E+01	5
211	10.748	42.548	2	3.34E+00	1.04E+01	4.68E+00	3.34E+00	1.04E+01	7.75E+01	8.22E+01	8
226	10.758	42.201	4	1.74E+00	1.51E+00	2.44E+00	1.74E+00	1.51E+00	1.30E+01	1.54E+01	5
227	10.836	42.132	4	1.39E+00	6.33E-01	1.95E+00	1.39E+00	6.33E-01	6.38E+00	8.32E+00	4
228	10.859	42.183	4	1.45E+00	9.09E-01	2.03E+00	1.45E+00	9.09E-01	8.39E+00	1.04E+01	4
229	10.939	42.475	4	2.44E+00	5.47E+00	3.42E+00	2.44E+00	5.47E+00	4.17E+01	4.51E+01	6
240	10.491	42.450	5	1.16E+00	2.17E+00	1.62E+00	1.16E+00	2.17E+00	1.68E+01	1.84E+01	5
247	10.846	42.387	5	1.90E+00	2.79E+00	2.66E+00	1.90E+00	2.79E+00	2.22E+01	2.49E+01	5
248	10.955	42.100	5	1.31E+00	5.68E-01	1.83E+00	1.31E+00	5.68E-01	5.81E+00	7.64E+00	4
264	10.880	42.213	6	1.54E+00	1.16E+00	2.16E+00	1.54E+00	1.16E+00	1.03E+01	1.24E+01	4
265	11.038	42.174	3	8.55E-01	4.96E-01	1.20E+00	8.55E-01	4.96E-01	4.67E+00	5.87E+00	3
269	10.759	42.060	2	1.46E+00	6.07E-01	2.04E+00	1.46E+00	6.07E-01	6.29E+00	8.34E+00	4
270	11.077	42.122	2	4.80E-01	1.40E-01	6.72E-01	4.80E-01	1.40E-01	1.65E+00	2.32E+00	2
273	10.992	42.130	4	1.18E+00	5.73E-01	1.65E+00	1.18E+00	5.73E-01	5.66E+00	7.32E+00	4
274	10.943	42.205	4	1.54E+00	1.25E+00	2.16E+00	1.54E+00	1.25E+00	1.09E+01	1.31E+01	4
275	10.922	42.146	4	1.43E+00	8.60E-01	2.00E+00	1.43E+00	8.60E-01	8.02E+00	1.00E+01	4
276	11.113	42.169	4	2.42E-01	0.00E+00	3.39E-01	2.42E-01	0.00E+00	3.39E-01	6.78E-01	2
277	10.886	42.648	1	3.41E+00	1.27E+01	4.77E+00	3.41E+00	1.27E+01	9.37E+01	9.84E+01	8
278	10.882	42.109	1	1.36E+00	6.08E-01	1.90E+00	1.36E+00	6.08E-01	6.16E+00	8.06E+00	4
279	11.151	42.140	1	7.42E-02	0.00E+00	1.04E-01	7.42E-02	0.00E+00	1.04E-01	2.08E-01	1
280	11.031	42.559	2	1.74E+00	4.40E+00	2.44E+00	1.74E+00	4.40E+00	3.32E+01	3.57E+01	6
281	10.438	42.395	2	5.21E-01	6.44E-01	7.29E-01	5.21E-01	6.44E-01	5.24E+00	5.97E+00	3
282	10.719	42.175	2	1.73E+00	1.37E+00	2.42E+00	1.73E+00	1.37E+00	1.20E+01	1.44E+01	4
284	10.749	42.595	2	3.68E+00	1.31E+01	5.15E+00	3.68E+00	1.31E+01	9.69E+01	1.02E+02	8
321	11.110	42.321	1	2.87E-01	1.56E-01	4.02E-01	2.87E-01	1.56E-01	1.49E+00	1.90E+00	2
322	10.514	42.291	4	1.06E+00	1.14E+00	1.48E+00	1.06E+00	1.14E+00	9.46E+00	1.09E+01	4
323	10.517	42.409	3	1.31E+00	2.13E+00	1.83E+00	1.31E+00	2.13E+00	1.67E+01	1.86E+01	5
324	10.448	42.294	3	5.25E-01	5.06E-01	7.35E-01	5.25E-01	5.06E-01	4.28E+00	5.01E+00	3
325	10.492	42.500	9	1.28E+00	2.82E+00	1.79E+00	1.28E+00	2.82E+00	2.15E+01	2.33E+01	5

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

Case 2: Protected			240 rounds at aimpoint (10.75, 43.75)								
40	10.792	42.386	5	0.00E+00	0.00E+00	0.00E+00	1.64E+00	4.12E+00	3.11E+01	3.11E+01	6
43	10.740	42.320	1	0.00E+00	0.00E+00	0.00E+00	1.71E+00	3.44E+00	2.65E+01	2.65E+01	5
44	10.438	42.496	2	0.00E+00	0.00E+00	0.00E+00	4.58E-01	1.33E+00	9.95E+00	9.95E+00	4
71	10.734	42.486	1	0.00E+00	0.00E+00	0.00E+00	1.98E+00	9.35E+00	6.82E+01	6.82E+01	7
72	10.680	42.398	1	0.00E+00	0.00E+00	0.00E+00	1.78E+00	4.97E+00	3.73E+01	3.73E+01	6
73	10.841	42.495	1	0.00E+00	0.00E+00	0.00E+00	1.64E+00	6.12E+00	4.51E+01	4.51E+01	6
130	10.790	42.307	3	0.00E+00	0.00E+00	0.00E+00	1.54E+00	2.65E+00	2.07E+01	2.07E+01	5
131	10.723	42.397	2	0.00E+00	0.00E+00	0.00E+00	1.83E+00	5.47E+00	4.09E+01	4.09E+01	6
135	10.895	42.320	2	0.00E+00	0.00E+00	0.00E+00	1.49E+00	2.60E+00	2.03E+01	2.03E+01	5
140	11.090	42.435	2	0.00E+00	0.00E+00	0.00E+00	4.16E-01	8.32E-01	6.41E+00	6.41E+00	4
141	10.957	42.331	2	0.00E+00	0.00E+00	0.00E+00	1.48E+00	2.76E+00	2.14E+01	2.14E+01	5
142	10.598	42.284	2	0.00E+00	0.00E+00	0.00E+00	1.30E+00	1.83E+00	1.46E+01	1.46E+01	4
157	11.013	42.282	2	0.00E+00	0.00E+00	0.00E+00	1.06E+00	1.43E+00	1.15E+01	1.15E+01	4
180	10.861	43.129	4	2.13E+00	1.71E+02	2.98E+00	7.01E+00	5.14E+02	3.61E+03	3.61E+03	8
182	10.559	43.004	4	1.61E+00	2.58E+01	2.25E+00	5.82E+00	1.05E+02	7.43E+02	7.45E+02	8
206	10.774	42.454	2	0.00E+00	0.00E+00	0.00E+00	1.82E+00	6.91E+00	5.09E+01	5.09E+01	7
207	10.948	42.402	2	0.00E+00	0.00E+00	0.00E+00	1.63E+00	4.26E+00	3.21E+01	3.21E+01	6
208	11.091	42.478	2	0.00E+00	0.00E+00	0.00E+00	4.15E-01	1.02E+00	7.72E+00	7.72E+00	4
209	10.869	42.349	2	0.00E+00	0.00E+00	0.00E+00	1.48E+00	2.78E+00	2.15E+01	2.15E+01	5
211	10.748	42.548	2	0.00E+00	0.00E+00	0.00E+00	2.09E+00	1.24E+01	8.97E+01	8.97E+01	8
226	10.758	42.201	4	0.00E+00	0.00E+00	0.00E+00	1.46E+00	1.67E+00	1.37E+01	1.37E+01	4
227	10.836	42.132	4	0.00E+00	0.00E+00	0.00E+00	1.20E+00	6.54E-01	6.26E+00	6.26E+00	4
228	10.859	42.183	4	0.00E+00	0.00E+00	0.00E+00	1.26E+00	9.64E-01	8.51E+00	8.51E+00	4
229	10.939	42.475	4	0.00E+00	0.00E+00	0.00E+00	1.73E+00	6.79E+00	5.00E+01	5.00E+01	6
240	10.491	42.450	5	0.00E+00	0.00E+00	0.00E+00	8.72E-01	2.59E+00	1.94E+01	1.94E+01	5
247	10.846	42.387	5	0.00E+00	0.00E+00	0.00E+00	1.50E+00	3.35E+00	2.56E+01	2.56E+01	5
248	10.955	42.100	5	0.00E+00	0.00E+00	0.00E+00	1.14E+00	5.58E-01	5.50E+00	5.50E+00	3
264	10.880	42.213	6	0.00E+00	0.00E+00	0.00E+00	1.32E+00	1.29E+00	1.09E+01	1.09E+01	4
265	11.038	42.174	3	0.00E+00	0.00E+00	0.00E+00	7.60E-01	4.58E-01	4.27E+00	4.27E+00	3
269	10.759	42.060	2	0.00E+00	0.00E+00	0.00E+00	1.18E+00	6.13E-01	5.94E+00	5.94E+00	3
270	11.077	42.122	2	0.00E+00	0.00E+00	0.00E+00	4.40E-01	5.99E-02	1.04E+00	1.04E+00	2
273	10.992	42.130	4	0.00E+00	0.00E+00	0.00E+00	1.03E+00	5.50E-01	5.29E+00	5.29E+00	3
274	10.943	42.205	4	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.34E+00	1.12E+01	1.12E+01	4
275	10.922	42.146	4	0.00E+00	0.00E+00	0.00E+00	1.24E+00	9.26E-01	8.22E+00	8.22E+00	4
276	11.113	42.169	4	0.00E+00	0.00E+00	0.00E+00	2.28E-01	1.70E-02	4.38E-01	4.38E-01	2
277	10.886	42.648	1	9.85E-04	0.00E+00	1.38E-03	1.91E+00	1.59E+01	1.14E+02	1.14E+02	8
278	10.882	42.109	1	0.00E+00	0.00E+00	0.00E+00	1.17E+00	5.89E-01	5.76E+00	5.76E+00	3
279	11.151	42.140	1	0.00E+00	0.00E+00	0.00E+00	6.69E-02	0.00E+00	9.37E-02	9.37E-02	1
280	11.031	42.559	2	0.00E+00	0.00E+00	0.00E+00	1.17E+00	5.54E+00	4.04E+01	4.04E+01	6
281	10.438	42.395	2	0.00E+00	0.00E+00	0.00E+00	4.25E-01	7.72E-01	6.00E+00	6.00E+00	3
282	10.719	42.175	2	0.00E+00	0.00E+00	0.00E+00	1.44E+00	1.54E+00	1.28E+01	1.28E+01	4
284	10.749	42.595	2	1.13E-02	0.00E+00	1.58E-02	2.20E+00	1.62E+01	1.16E+02	1.16E+02	8
321	11.110	42.321	1	0.00E+00	0.00E+00	0.00E+00	2.52E-01	1.81E-01	1.62E+00	1.62E+00	2
322	10.514	42.291	4	0.00E+00	0.00E+00	0.00E+00	8.88E-01	1.28E+00	1.02E+01	1.02E+01	4
323	10.517	42.409	3	0.00E+00	0.00E+00	0.00E+00	1.01E+00	2.57E+00	1.94E+01	1.94E+01	5
324	10.448	42.294	3	0.00E+00	0.00E+00	0.00E+00	4.51E-01	5.27E-01	4.32E+00	4.32E+00	3
325	10.492	42.500	9	0.00E+00	0.00E+00	0.00E+00	9.19E-01	3.51E+00	2.59E+01	2.59E+01	5

VX MRLS
Heavy Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				720 rounds at aimpoint (10.80, 44.50)							
40	10.792	42.386	5	3.42E+00	2.85E+00	4.79E+00	3.42E+00	2.85E+00	2.47E+01	2.95E+01	5
43	10.740	42.320	1	2.96E+00	1.80E+00	4.14E+00	2.96E+00	1.80E+00	1.67E+01	2.09E+01	5
44	10.438	42.496	2	2.46E+00	1.88E+00	3.44E+00	2.46E+00	1.88E+00	1.66E+01	2.00E+01	5
71	10.734	42.486	1	3.44E+00	3.79E+00	4.82E+00	3.44E+00	3.79E+00	3.13E+01	3.62E+01	6
72	10.680	42.398	1	2.98E+00	2.06E+00	4.17E+00	2.98E+00	2.06E+00	1.86E+01	2.28E+01	5
73	10.841	42.495	1	3.83E+00	4.39E+00	5.36E+00	3.83E+00	4.39E+00	3.61E+01	4.15E+01	6
130	10.790	42.307	3	3.12E+00	1.97E+00	4.37E+00	3.12E+00	1.97E+00	1.82E+01	2.25E+01	5
131	10.723	42.397	2	3.10E+00	2.30E+00	4.34E+00	3.10E+00	2.30E+00	2.04E+01	2.48E+01	5
135	10.895	42.320	2	3.07E+00	1.69E+00	4.30E+00	3.07E+00	1.69E+00	1.61E+01	2.04E+01	5

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

140	11.090	42.435	2	2.80E+00	2.14E+00	3.92E+00	2.80E+00	2.14E+00	1.89E+01	2.28E+01	5
141	10.957	42.331	2	2.80E+00	1.49E+00	3.92E+00	2.80E+00	1.49E+00	1.44E+01	1.83E+01	5
142	10.598	42.284	2	2.79E+00	1.20E+00	3.91E+00	2.79E+00	1.20E+00	1.23E+01	1.62E+01	5
157	11.013	42.282	2	2.47E+00	9.97E-01	3.46E+00	2.47E+00	9.97E-01	1.04E+01	1.39E+01	4
180	10.861	43.129	4	1.53E+01	7.96E+01	2.14E+01	1.53E+01	7.96E+01	5.79E+02	6.00E+02	8
181	11.213	43.174	4	1.01E+01	4.75E+01	1.41E+01	1.01E+01	4.75E+01	3.47E+02	3.61E+02	8
182	10.559	43.004	4	9.95E+00	3.67E+01	1.39E+01	9.95E+00	3.67E+01	2.71E+02	2.85E+02	8
206	10.774	42.454	2	3.59E+00	3.74E+00	5.03E+00	3.59E+00	3.74E+00	3.12E+01	3.62E+01	6
207	10.948	42.402	2	3.05E+00	2.15E+00	4.27E+00	3.05E+00	2.15E+00	1.93E+01	2.36E+01	5
208	11.091	42.478	2	2.92E+00	2.59E+00	4.09E+00	2.92E+00	2.59E+00	2.22E+01	2.63E+01	5
209	10.869	42.349	2	3.25E+00	2.09E+00	4.55E+00	3.25E+00	2.09E+00	1.92E+01	2.37E+01	5
211	10.748	42.548	2	3.86E+00	5.40E+00	5.40E+00	3.86E+00	5.40E+00	4.32E+01	4.86E+01	6
226	10.758	42.201	4	2.75E+00	1.04E+00	3.85E+00	2.75E+00	1.04E+00	1.11E+01	1.50E+01	4
227	10.836	42.132	4	2.71E+00	6.84E-01	3.79E+00	2.71E+00	6.84E-01	8.58E+00	1.24E+01	4
228	10.859	42.183	4	2.82E+00	8.68E-01	3.95E+00	2.82E+00	8.68E-01	1.00E+01	1.40E+01	4
229	10.939	42.475	4	3.33E+00	3.19E+00	4.66E+00	3.33E+00	3.19E+00	2.70E+01	3.17E+01	6
240	10.491	42.450	5	2.82E+00	2.10E+00	3.95E+00	2.82E+00	2.10E+00	1.86E+01	2.26E+01	5
247	10.846	42.387	5	3.44E+00	2.66E+00	4.82E+00	3.44E+00	2.66E+00	2.34E+01	2.83E+01	5
248	10.955	42.100	5	2.34E+00	4.23E-01	3.28E+00	2.34E+00	4.23E-01	6.24E+00	9.51E+00	4
264	10.880	42.213	6	2.84E+00	9.87E-01	3.98E+00	2.84E+00	9.87E-01	1.09E+01	1.49E+01	4
265	11.038	42.174	3	2.26E+00	4.91E-01	3.16E+00	2.26E+00	4.91E-01	6.60E+00	9.77E+00	4
269	10.759	42.060	2	2.46E+00	4.50E-01	3.44E+00	2.46E+00	4.50E-01	6.59E+00	1.00E+01	4
270	11.077	42.122	2	2.14E+00	3.60E-01	3.00E+00	2.14E+00	3.60E-01	5.52E+00	8.51E+00	4
273	10.992	42.130	4	2.28E+00	4.24E-01	3.19E+00	2.28E+00	4.24E-01	6.16E+00	9.35E+00	4
274	10.943	42.205	4	2.59E+00	7.93E-01	3.63E+00	2.59E+00	7.93E-01	9.18E+00	1.28E+01	4
275	10.922	42.146	4	2.55E+00	5.78E-01	3.57E+00	2.55E+00	5.78E-01	7.62E+00	1.12E+01	4
276	11.113	42.169	4	2.19E+00	4.57E-01	3.07E+00	2.19E+00	4.57E-01	6.27E+00	9.33E+00	4
277	10.886	42.648	1	4.61E+00	8.24E+00	6.45E+00	4.61E+00	8.24E+00	6.41E+01	7.06E+01	7
278	10.882	42.109	1	2.58E+00	5.22E-01	3.61E+00	2.58E+00	5.22E-01	7.27E+00	1.09E+01	4
279	11.151	42.140	1	2.06E+00	2.90E-01	2.88E+00	2.06E+00	2.90E-01	4.91E+00	7.80E+00	4
280	11.031	42.559	2	3.20E+00	3.79E+00	4.48E+00	3.20E+00	3.79E+00	3.10E+01	3.55E+01	6
281	10.438	42.395	2	2.26E+00	1.13E+00	3.16E+00	2.26E+00	1.13E+00	1.11E+01	1.42E+01	4
282	10.719	42.175	2	2.55E+00	6.92E-01	3.57E+00	2.55E+00	6.92E-01	8.41E+00	1.20E+01	4
284	10.749	42.595	2	4.13E+00	6.71E+00	5.78E+00	4.13E+00	6.71E+00	5.28E+01	5.85E+01	7
321	11.110	42.321	1	2.48E+00	1.13E+00	3.47E+00	2.48E+00	1.13E+00	1.14E+01	1.49E+01	4
322	10.514	42.291	4	2.54E+00	1.05E+00	3.56E+00	2.54E+00	1.05E+00	1.09E+01	1.45E+01	4
323	10.517	42.409	3	2.90E+00	1.95E+00	4.06E+00	2.90E+00	1.95E+00	1.77E+01	2.18E+01	5
324	10.448	42.294	3	2.12E+00	6.72E-01	2.97E+00	2.12E+00	6.72E-01	7.67E+00	1.06E+01	4
325	10.492	42.500	9	2.96E+00	2.72E+00	4.14E+00	2.96E+00	2.72E+00	2.32E+01	2.73E+01	5

Case 2: Protected 720 rounds at aimpoint (10.90, 44.10)

40	10.792	42.386	5	0.00E+00	0.00E+00	0.00E+00	7.57E-01	2.38E+00	1.77E+01	1.77E+01	5
43	10.740	42.320	1	0.00E+00	0.00E+00	0.00E+00	6.16E-01	2.78E+00	2.03E+01	2.03E+01	5
44	10.438	42.496	2	0.00E+00	0.00E+00	0.00E+00	4.72E-01	1.41E+00	1.05E+01	1.05E+01	4
71	10.734	42.486	1	0.00E+00	0.00E+00	0.00E+00	9.37E-01	6.44E+00	4.64E+01	4.64E+01	6
72	10.680	42.398	1	0.00E+00	0.00E+00	0.00E+00	7.38E-01	2.50E+00	1.85E+01	1.85E+01	5
73	10.841	42.495	1	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.30E+01	9.29E+01	9.29E+01	8
130	10.790	42.307	3	0.00E+00	0.00E+00	0.00E+00	6.11E-01	1.51E+00	1.14E+01	1.14E+01	4
131	10.723	42.397	2	0.00E+00	0.00E+00	0.00E+00	7.36E-01	3.46E+00	2.53E+01	2.53E+01	5
135	10.895	42.320	2	0.00E+00	0.00E+00	0.00E+00	8.02E-01	2.58E+00	1.92E+01	1.92E+01	5
140	11.090	42.435	2	0.00E+00	0.00E+00	0.00E+00	6.98E-01	2.15E+00	1.60E+01	1.60E+01	5
141	10.957	42.331	2	0.00E+00	0.00E+00	0.00E+00	7.15E-01	1.80E+00	1.36E+01	1.36E+01	4
142	10.598	42.284	2	0.00E+00	0.00E+00	0.00E+00	4.83E-01	1.65E-01	1.83E+00	1.83E+00	2
157	11.013	42.282	2	0.00E+00	0.00E+00	0.00E+00	5.07E-01	4.30E-01	3.72E+00	3.72E+00	3
180	10.861	43.129	4	3.62E-02	1.37E+02	5.07E-02	1.38E+00	2.12E+03	1.48E+04	1.48E+04	8
181	11.213	43.174	4	2.35E-01	1.10E+02	3.29E-01	2.53E+00	1.90E+03	1.33E+04	1.33E+04	8
182	10.559	43.004	4	8.37E-02	1.38E-01	1.17E-01	1.52E+00	1.19E+02	8.35E+02	8.35E+02	8
206	10.774	42.454	2	0.00E+00	0.00E+00	0.00E+00	8.97E-01	4.92E+00	3.57E+01	3.57E+01	6
207	10.948	42.402	2	0.00E+00	0.00E+00	0.00E+00	9.22E-01	2.99E+00	2.22E+01	2.22E+01	5
208	11.091	42.478	2	0.00E+00	0.00E+00	0.00E+00	7.70E-01	2.63E+00	1.95E+01	1.95E+01	5
209	10.869	42.349	2	0.00E+00	0.00E+00	0.00E+00	9.69E-01	4.36E+00	3.19E+01	3.19E+01	6
211	10.748	42.548	2	7.30E-04	0.00E+00	1.02E-03	1.15E+00	1.08E+01	7.72E+01	7.72E+01	8
226	10.758	42.201	4	0.00E+00	0.00E+00	0.00E+00	4.83E-01	1.27E+00	9.57E+00	9.57E+00	4
227	10.836	42.132	4	0.00E+00	0.00E+00	0.00E+00	4.44E-01	5.33E-01	4.35E+00	4.35E+00	3
228	10.859	42.183	4	0.00E+00	0.00E+00	0.00E+00	5.96E-01	9.89E-01	7.76E+00	7.76E+00	4
229	10.939	42.475	4	0.00E+00	0.00E+00	0.00E+00	1.10E+00	4.75E+00	3.48E+01	3.48E+01	6
240	10.491	42.450	5	0.00E+00	0.00E+00	0.00E+00	6.16E-01	2.37E+00	1.75E+01	1.75E+01	5
247	10.846	42.387	5	0.00E+00	0.00E+00	0.00E+00	1.13E+00	7.22E+00	5.21E+01	5.21E+01	7
248	10.955	42.100	5	0.00E+00	0.00E+00	0.00E+00	3.57E-01	4.05E-01	3.33E+00	3.33E+00	3

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

264	10.880	42.213	6	0.00E+00	0.00E+00	0.00E+00	6.34E-01	1.30E+00	9.99E+00	9.99E+00	4
265	11.038	42.174	3	0.00E+00	0.00E+00	0.00E+00	3.60E-01	1.88E-01	1.82E+00	1.82E+00	2
269	10.759	42.060	2	0.00E+00	0.00E+00	0.00E+00	3.31E-01	2.96E-01	2.54E+00	2.54E+00	2
270	11.077	42.122	2	0.00E+00	0.00E+00	0.00E+00	3.01E-01	2.49E-01	2.16E+00	2.16E+00	2
273	10.992	42.130	4	0.00E+00	0.00E+00	0.00E+00	3.49E-01	1.72E-01	1.69E+00	1.69E+00	2
274	10.943	42.205	4	0.00E+00	0.00E+00	0.00E+00	5.25E-01	1.06E+00	8.16E+00	8.16E+00	4
275	10.922	42.146	4	0.00E+00	0.00E+00	0.00E+00	4.60E-01	6.98E-01	5.53E+00	5.53E+00	3
276	11.113	42.169	4	0.00E+00	0.00E+00	0.00E+00	3.71E-01	4.71E-01	3.82E+00	3.82E+00	3
277	10.886	42.648	1	8.41E-02	0.00E+00	1.18E-01	1.68E+00	2.07E+01	1.47E+02	1.47E+02	8
278	10.882	42.109	1	0.00E+00	0.00E+00	0.00E+00	4.17E-01	5.56E-01	4.48E+00	4.48E+00	3
279	11.151	42.140	1	0.00E+00	0.00E+00	0.00E+00	4.15E-01	4.40E-01	3.66E+00	3.66E+00	3
280	11.031	42.559	2	1.58E-03	0.00E+00	2.21E-03	1.15E+00	5.54E+00	4.04E+01	4.04E+01	6
281	10.438	42.395	2	0.00E+00	0.00E+00	0.00E+00	3.69E-01	8.28E-01	6.31E+00	6.31E+00	4
282	10.719	42.175	2	0.00E+00	0.00E+00	0.00E+00	4.38E-01	9.38E-01	7.18E+00	7.18E+00	4
284	10.749	42.595	2	1.47E-03	0.00E+00	2.06E-03	1.29E+00	1.48E+01	1.05E+02	1.05E+02	8
321	11.110	42.321	1	0.00E+00	0.00E+00	0.00E+00	5.18E-01	1.41E+00	1.06E+01	1.06E+01	4
322	10.514	42.291	4	0.00E+00	0.00E+00	0.00E+00	4.54E-01	9.01E-01	6.94E+00	6.94E+00	4
323	10.517	42.409	3	0.00E+00	0.00E+00	0.00E+00	6.03E-01	1.97E+00	1.46E+01	1.46E+01	4
324	10.448	42.294	3	0.00E+00	0.00E+00	0.00E+00	2.95E-01	5.53E-01	4.28E+00	4.28E+00	3
325	10.492	42.500	9	0.00E+00	0.00E+00	0.00E+00	6.84E-01	3.05E+00	2.23E+01	2.23E+01	5

VX 250kg Bomb
Light Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				2 rounds at aimpoint (9.10, 50.60)								
4	9.225	50.221	4	1.45E+00	6.72E+01	2.03E+00	1.45E+00	6.72E+01	4.72E+02	4.74E+02	8	
6	9.225	50.524	4	2.70E-01	2.14E+01	3.78E-01	2.70E-01	2.14E+01	1.50E+02	1.51E+02	8	
8	8.954	50.542	4	2.64E-02	2.16E+00	3.70E-02	2.64E-02	2.16E+00	1.52E+01	1.52E+01	5	
18	9.008	49.534	2	9.32E+00	2.16E+02	1.30E+01	9.32E+00	2.16E+02	1.53E+03	1.54E+03	8	
25	9.203	47.020	2	4.12E-02	4.87E-01	5.77E-02	4.12E-02	4.87E-01	3.47E+00	3.52E+00	3	
27	9.010	46.883	2	4.31E-02	4.64E-01	6.03E-02	4.31E-02	4.64E-01	3.31E+00	3.37E+00	3	
29	9.155	46.980	2	1.96E-02	2.37E-01	2.74E-02	1.96E-02	2.37E-01	1.69E+00	1.71E+00	2	
33	9.134	45.693	1	0.00E+00	3.10E-02	0.00E+00	0.00E+00	3.10E-02	2.17E-01	2.17E-01	1	
51	9.325	48.044	2	9.13E-02	1.12E+00	1.28E-01	9.13E-02	1.12E+00	7.97E+00	8.10E+00	4	
52	9.035	48.198	2	2.67E-01	3.69E+00	3.74E-01	2.67E-01	3.69E+00	2.62E+01	2.66E+01	5	
54	9.191	48.044	2	1.36E-01	1.78E+00	1.90E-01	1.36E-01	1.78E+00	1.27E+01	1.28E+01	4	
101	8.983	49.851	9	1.42E+01	4.19E+02	1.99E+01	1.42E+01	4.19E+02	2.95E+03	2.97E+03	8	
128	9.059	46.875	4	2.45E-02	3.33E-01	3.43E-02	2.45E-02	3.33E-01	2.37E+00	2.40E+00	2	
137	8.931	49.541	3	3.19E-02	6.69E-01	4.47E-02	3.19E-02	6.69E-01	4.73E+00	4.77E+00	3	
143	9.168	48.069	2	7.66E-02	9.62E-01	1.07E-01	7.66E-02	9.62E-01	6.84E+00	6.95E+00	4	
144	9.281	48.111	3	2.48E-01	3.34E+00	3.47E-01	2.48E-01	3.34E+00	2.37E+01	2.41E+01	5	
145	9.077	48.397	3	9.21E-02	1.39E+00	1.29E-01	9.21E-02	1.39E+00	9.86E+00	9.99E+00	4	
146	9.170	48.242	3	8.51E-02	1.16E+00	1.19E-01	8.51E-02	1.16E+00	8.24E+00	8.36E+00	4	
147	9.224	48.123	3	2.73E-01	3.67E+00	3.82E-01	2.73E-01	3.67E+00	2.61E+01	2.65E+01	5	
149	9.103	48.033	3	3.32E-02	4.58E-01	4.65E-02	3.32E-02	4.58E-01	3.25E+00	3.30E+00	3	
150	9.155	48.357	3	3.70E-02	6.00E-01	5.18E-02	3.70E-02	6.00E-01	4.25E+00	4.30E+00	3	
161	9.225	46.968	2	5.07E-02	5.35E-01	7.10E-02	5.07E-02	5.35E-01	3.82E+00	3.89E+00	3	
166	8.984	48.395	3	4.87E-01	6.96E+00	6.82E-01	4.87E-01	6.96E+00	4.94E+01	5.01E+01	7	
190	9.092	48.131	8	5.48E-02	7.15E-01	7.67E-02	5.48E-02	7.15E-01	5.08E+00	5.16E+00	3	
191	9.196	46.746	2	1.78E-02	2.80E-01	2.49E-02	1.78E-02	2.80E-01	1.98E+00	2.01E+00	2	
192	9.123	46.758	2	5.19E-06	1.16E-01	7.27E-06	5.19E-06	1.16E-01	8.12E-01	8.12E-01	2	
201	9.312	45.828	2	8.08E-07	0.00E+00	1.13E-06	8.08E-07	0.00E+00	1.13E-06	2.26E-06	1	
204	9.256	48.008	2	2.47E-01	3.16E+00	3.46E-01	2.47E-01	3.16E+00	2.25E+01	2.28E+01	5	
213	9.046	48.117	3	1.94E-01	2.64E+00	2.72E-01	1.94E-01	2.64E+00	1.88E+01	1.90E+01	5	
214	9.112	48.189	3	1.91E-02	3.19E-01	2.67E-02	1.91E-02	3.19E-01	2.26E+00	2.29E+00	2	
216	9.062	46.820	4	1.96E-02	2.87E-01	2.74E-02	1.96E-02	2.87E-01	2.04E+00	2.06E+00	2	
217	9.083	47.027	4	3.07E-02	3.21E-01	4.30E-02	3.07E-02	3.21E-01	2.29E+00	2.33E+00	2	
218	9.051	47.019	4	3.73E-02	4.63E-01	5.22E-02	3.73E-02	4.63E-01	3.29E+00	3.35E+00	3	
219	9.013	47.028	4	5.60E-02	6.08E-01	7.84E-02	5.60E-02	6.08E-01	4.33E+00	4.41E+00	3	
220	8.964	47.019	4	4.74E-02	5.33E-01	6.64E-02	4.74E-02	5.33E-01	3.80E+00	3.86E+00	3	
232	9.283	48.051	5	2.16E-01	2.86E+00	3.02E-01	2.16E-01	2.86E+00	2.03E+01	2.06E+01	5	
233	9.076	48.344	5	9.54E-02	1.39E+00	1.34E-01	9.54E-02	1.39E+00	9.86E+00	1.00E+01	4	

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

234	9.171	48.201	5	8.84E-02	1.18E+00	1.24E-01	8.84E-02	1.18E+00	8.38E+00	8.51E+00	4
236	9.223	48.060	5	2.39E-01	3.17E+00	3.35E-01	2.39E-01	3.17E+00	2.25E+01	2.29E+01	5
237	9.156	48.309	5	4.34E-02	6.50E-01	6.08E-02	4.34E-02	6.50E-01	4.61E+00	4.67E+00	3
238	8.987	48.346	5	4.57E-01	6.50E+00	6.40E-01	4.57E-01	6.50E+00	4.61E+01	4.68E+01	6
255	9.070	49.530	7	2.82E-02	5.90E-01	3.95E-02	2.82E-02	5.90E-01	4.17E+00	4.21E+00	3
261	9.121	46.815	2	1.34E-03	1.49E-01	1.88E-03	1.34E-03	1.49E-01	1.04E+00	1.05E+00	2
291	8.926	50.343	2	1.08E-05	0.00E+00	1.51E-05	1.08E-05	0.00E+00	1.51E-05	3.02E-05	1
297	9.070	47.086	5	3.72E-02	4.26E-01	5.21E-02	3.72E-02	4.26E-01	3.03E+00	3.09E+00	3
298	9.042	47.071	5	4.77E-02	5.53E-01	6.68E-02	4.77E-02	5.53E-01	3.94E+00	4.00E+00	3
299	8.995	47.083	5	6.09E-02	6.79E-01	8.53E-02	6.09E-02	6.79E-01	4.84E+00	4.92E+00	3
300	8.958	47.076	5	4.82E-02	5.57E-01	6.75E-02	4.82E-02	5.57E-01	3.97E+00	4.03E+00	3

Case 2: Protected 2 rounds at aimpoint (9.10, 50.60)

4	9.225	50.221	4	9.38E-06	2.24E+01	1.31E-05	3.31E-03	6.41E+01	4.49E+02	4.49E+02	8
6	9.225	50.524	4	1.77E-06	7.13E+00	2.48E-06	6.06E-05	2.04E+01	1.43E+02	1.43E+02	8
8	8.954	50.542	4	1.79E-07	7.19E-01	2.51E-07	6.01E-06	2.06E+00	1.44E+01	1.44E+01	4
18	9.008	49.534	2	3.93E-02	7.19E+01	5.50E-02	1.44E-01	2.06E+02	1.44E+03	1.44E+03	8
25	9.203	47.020	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-01	3.17E+00	3.17E+00	3
27	9.010	46.883	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-01	3.02E+00	3.02E+00	3
29	9.155	46.980	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-01	1.55E+00	1.55E+00	2
33	9.134	45.693	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-02	2.02E-01	2.02E-01	1
51	9.325	48.044	2	0.00E+00	3.47E-01	0.00E+00	0.00E+00	1.07E+00	7.49E+00	7.49E+00	4
52	9.035	48.198	2	0.00E+00	1.19E+00	0.00E+00	0.00E+00	3.52E+00	2.46E+01	2.46E+01	5
54	9.191	48.044	2	0.00E+00	5.49E-01	0.00E+00	0.00E+00	1.69E+00	1.18E+01	1.18E+01	4
101	8.983	49.851	9	7.53E-03	1.40E+02	1.05E-02	1.02E-01	3.99E+02	2.79E+03	2.79E+03	8
137	8.931	49.541	3	0.00E+00	2.23E-01	0.00E+00	8.17E-07	6.38E-01	4.47E+00	4.47E+00	3
143	9.168	48.069	2	0.00E+00	2.99E-01	0.00E+00	0.00E+00	9.16E-01	6.41E+00	6.41E+00	4
144	9.281	48.111	3	0.00E+00	1.06E+00	0.00E+00	0.00E+00	3.18E+00	2.23E+01	2.23E+01	5
145	9.077	48.397	3	0.00E+00	4.48E-01	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
146	9.170	48.242	3	0.00E+00	3.71E-01	0.00E+00	0.00E+00	1.11E+00	7.77E+00	7.77E+00	4
147	9.224	48.123	3	0.00E+00	1.17E+00	0.00E+00	0.00E+00	3.49E+00	2.44E+01	2.44E+01	5
149	9.103	48.033	3	0.00E+00	1.34E-01	0.00E+00	0.00E+00	4.35E-01	3.05E+00	3.05E+00	3
150	9.155	48.357	3	0.00E+00	1.94E-01	0.00E+00	0.00E+00	5.72E-01	4.00E+00	4.00E+00	3
161	9.225	46.968	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-01	3.48E+00	3.48E+00	3
166	8.984	48.395	3	0.00E+00	2.27E+00	0.00E+00	0.00E+00	6.63E+00	4.64E+01	4.64E+01	6
190	9.092	48.131	8	0.00E+00	2.20E-01	0.00E+00	0.00E+00	6.80E-01	4.76E+00	4.76E+00	3
191	9.196	46.746	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-01	1.82E+00	1.82E+00	2
192	9.123	46.758	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-01	7.56E-01	7.56E-01	2
204	9.256	48.008	2	0.00E+00	9.77E-01	0.00E+00	0.00E+00	3.01E+00	2.11E+01	2.11E+01	5
213	9.046	48.117	3	0.00E+00	8.31E-01	0.00E+00	0.00E+00	2.52E+00	1.76E+01	1.76E+01	5
214	9.112	48.189	3	0.00E+00	1.03E-01	0.00E+00	0.00E+00	3.04E-01	2.13E+00	2.13E+00	2
216	9.062	46.820	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-01	1.87E+00	1.87E+00	2
217	9.083	47.027	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-01	2.09E+00	2.09E+00	2
218	9.051	47.019	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-01	3.02E+00	3.02E+00	3
219	9.013	47.028	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-01	3.96E+00	3.96E+00	3
220	8.964	47.019	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-01	3.47E+00	3.47E+00	3
232	9.283	48.051	5	0.00E+00	8.94E-01	0.00E+00	0.00E+00	2.72E+00	1.90E+01	1.90E+01	5
233	9.076	48.344	5	0.00E+00	4.46E-01	0.00E+00	0.00E+00	1.33E+00	9.31E+00	9.31E+00	4
234	9.171	48.201	5	0.00E+00	3.74E-01	0.00E+00	0.00E+00	1.12E+00	7.84E+00	7.84E+00	4
236	9.223	48.060	5	0.00E+00	9.95E-01	0.00E+00	0.00E+00	3.02E+00	2.11E+01	2.11E+01	5
237	9.156	48.309	5	0.00E+00	2.09E-01	0.00E+00	0.00E+00	6.19E-01	4.33E+00	4.33E+00	3
238	8.987	48.346	5	0.00E+00	2.12E+00	0.00E+00	0.00E+00	6.20E+00	4.34E+01	4.34E+01	6
255	9.070	49.530	7	0.00E+00	1.97E-01	0.00E+00	6.74E-07	5.62E-01	3.93E+00	3.93E+00	3
261	9.121	46.815	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	9.73E-01	9.73E-01	2
291	8.926	50.343	2	0.00E+00	0.00E+00	0.00E+00	1.29E-08	0.00E+00	1.81E-08	1.81E-08	1
297	9.070	47.086	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-01	2.77E+00	2.77E+00	2
298	9.042	47.071	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-01	3.60E+00	3.60E+00	3
299	8.995	47.083	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-01	4.42E+00	4.42E+00	3
300	8.958	47.076	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-01	3.63E+00	3.63E+00	3

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

Case 1: Unprotected			12 rounds at aimpoint (8.95, 51.85)								
3	8.693	50.315	4	3.76E-01	6.10E+00	5.26E-01	3.76E-01	6.10E+00	4.32E+01	4.38E+01	6
4	9.225	50.221	4	3.82E+00	5.91E+01	5.35E+00	3.82E+00	5.91E+01	4.19E+02	4.24E+02	8
5	9.374	50.524	4	1.37E-01	2.61E+00	1.92E-01	1.37E-01	2.61E+00	1.85E+01	1.87E+01	5
6	9.225	50.524	4	7.08E+00	1.41E+02	9.91E+00	7.08E+00	1.41E+02	9.97E+02	1.01E+03	8
7	9.097	50.534	4	8.16E+00	1.68E+02	1.14E+01	8.16E+00	1.68E+02	1.19E+03	1.20E+03	8
8	8.954	50.542	4	6.49E+00	1.26E+02	9.09E+00	6.49E+00	1.26E+02	8.91E+02	9.00E+02	8
9	8.617	50.560	4	3.32E-05	0.00E+00	4.65E-05	3.32E-05	0.00E+00	4.65E-05	9.30E-05	1
15	9.347	45.818	3	9.02E-04	0.00E+00	1.26E-03	9.02E-04	0.00E+00	1.26E-03	2.53E-03	1
16	9.315	45.716	2	4.13E-03	0.00E+00	5.78E-03	4.13E-03	0.00E+00	5.78E-03	1.16E-02	1
17	8.700	49.576	2	4.10E-01	3.74E+00	5.74E-01	4.10E-01	3.74E+00	2.68E+01	2.73E+01	5
18	9.008	49.534	2	1.78E+00	1.48E+01	2.49E+00	1.78E+00	1.48E+01	1.06E+02	1.09E+02	8
25	9.203	47.020	2	1.08E-01	4.52E-01	1.51E-01	1.08E-01	4.52E-01	3.32E+00	3.47E+00	3
27	9.010	46.883	2	8.47E-02	4.46E-01	1.19E-01	8.47E-02	4.46E-01	3.24E+00	3.36E+00	3
29	9.155	46.980	2	9.31E-02	4.84E-01	1.30E-01	9.31E-02	4.84E-01	3.52E+00	3.65E+00	3
32	9.162	45.542	2	2.01E-02	1.57E-01	2.81E-02	2.01E-02	1.57E-01	1.13E+00	1.16E+00	2
33	9.134	45.693	1	1.91E-02	1.62E-01	2.67E-02	1.91E-02	1.62E-01	1.16E+00	1.19E+00	2
34	9.236	45.448	2	2.28E-02	1.27E-01	3.19E-02	2.28E-02	1.27E-01	9.21E-01	9.53E-01	2
36	9.184	45.669	1	1.78E-02	1.57E-01	2.49E-02	1.78E-02	1.57E-01	1.12E+00	1.15E+00	2
37	9.376	45.557	2	1.33E-06	0.00E+00	1.86E-06	1.33E-06	0.00E+00	1.86E-06	3.72E-06	1
41	9.312	45.638	2	8.32E-04	0.00E+00	1.16E-03	8.32E-04	0.00E+00	1.16E-03	2.33E-03	1
50	9.107	49.460	2	1.69E+00	1.28E+01	2.37E+00	1.69E+00	1.28E+01	9.20E+01	9.43E+01	8
51	9.325	48.044	2	3.08E-01	7.65E-01	4.31E-01	3.08E-01	7.65E-01	5.79E+00	6.22E+00	4
52	9.035	48.198	2	7.25E-01	2.02E+00	1.02E+00	7.25E-01	2.02E+00	1.52E+01	1.62E+01	5
54	9.191	48.044	2	5.96E-01	1.46E+00	8.34E-01	5.96E-01	1.46E+00	1.11E+01	1.19E+01	4
70	9.286	45.768	3	1.26E-02	3.42E-02	1.76E-02	1.26E-02	3.42E-02	2.57E-01	2.75E-01	2
98	8.568	49.822	9	2.15E-06	0.00E+00	3.01E-06	2.15E-06	0.00E+00	3.01E-06	6.02E-06	1
99	8.667	49.854	9	1.61E-01	1.92E+00	2.25E-01	1.61E-01	1.92E+00	1.37E+01	1.39E+01	4
100	8.855	49.854	4	2.25E+00	2.52E+01	3.15E+00	2.25E+00	2.52E+01	1.80E+02	1.83E+02	8
101	8.983	49.851	9	2.34E+00	2.63E+01	3.28E+00	2.34E+00	2.63E+01	1.87E+02	1.91E+02	8
124	9.209	45.648	6	1.79E-02	1.50E-01	2.51E-02	1.79E-02	1.50E-01	1.08E+00	1.10E+00	2
125	9.207	45.539	4	2.63E-02	1.52E-01	3.68E-02	2.63E-02	1.52E-01	1.10E+00	1.14E+00	2
127	8.809	48.886	3	1.05E+00	4.50E+00	1.47E+00	1.05E+00	4.50E+00	3.30E+01	3.44E+01	6
128	9.059	46.875	4	7.61E-02	4.39E-01	1.07E-01	7.61E-02	4.39E-01	3.18E+00	3.29E+00	3
136	8.845	49.551	3	1.74E+00	1.48E+01	2.44E+00	1.74E+00	1.48E+01	1.06E+02	1.08E+02	8
137	8.931	49.541	3	1.75E+00	1.47E+01	2.45E+00	1.75E+00	1.47E+01	1.05E+02	1.08E+02	8
143	9.168	48.069	2	6.23E-01	1.56E+00	8.72E-01	6.23E-01	1.56E+00	1.18E+01	1.27E+01	4
144	9.281	48.111	3	5.36E-01	1.29E+00	7.50E-01	5.36E-01	1.29E+00	9.78E+00	1.05E+01	4
145	9.077	48.397	3	8.54E-01	2.85E+00	1.20E+00	8.54E-01	2.85E+00	2.11E+01	2.23E+01	5
146	9.170	48.242	3	7.54E-01	2.16E+00	1.06E+00	7.54E-01	2.16E+00	1.62E+01	1.72E+01	5
147	9.224	48.123	3	6.51E-01	1.66E+00	9.11E-01	6.51E-01	1.66E+00	1.25E+01	1.34E+01	4
149	9.103	48.033	3	5.87E-01	1.43E+00	8.22E-01	5.87E-01	1.43E+00	1.08E+01	1.17E+01	4
150	9.155	48.357	3	8.32E-01	2.67E+00	1.16E+00	8.32E-01	2.67E+00	1.99E+01	2.10E+01	5
161	9.225	46.968	2	8.67E-02	4.22E-01	1.21E-01	8.67E-02	4.22E-01	3.08E+00	3.20E+00	3
166	8.984	48.395	3	8.50E-01	2.84E+00	1.19E+00	8.50E-01	2.84E+00	2.11E+01	2.23E+01	5
167	9.347	45.802	3	8.16E-04	0.00E+00	1.14E-03	8.16E-04	0.00E+00	1.14E-03	2.28E-03	1
171	9.409	49.498	4	2.58E-02	3.63E-01	3.61E-02	2.58E-02	3.63E-01	2.58E+00	2.61E+00	2
190	9.092	48.131	8	6.53E-01	1.76E+00	9.14E-01	6.53E-01	1.76E+00	1.32E+01	1.41E+01	4
191	9.196	46.746	2	6.67E-02	4.01E-01	9.34E-02	6.67E-02	4.01E-01	2.90E+00	2.99E+00	2
192	9.123	46.758	2	6.62E-02	4.16E-01	9.27E-02	6.62E-02	4.16E-01	3.00E+00	3.10E+00	3
200	9.182	45.726	2	1.78E-02	1.56E-01	2.49E-02	1.78E-02	1.56E-01	1.12E+00	1.14E+00	2
201	9.312	45.828	2	1.20E-02	0.00E+00	1.68E-02	1.20E-02	0.00E+00	1.68E-02	3.36E-02	1
202	9.294	45.449	2	1.78E-02	1.38E-02	2.49E-02	1.78E-02	1.38E-02	1.22E-01	1.46E-01	1
204	9.256	48.008	2	5.52E-01	1.22E+00	7.73E-01	5.52E-01	1.22E+00	9.31E+00	1.01E+01	4
213	9.046	48.117	3	6.61E-01	1.74E+00	9.25E-01	6.61E-01	1.74E+00	1.31E+01	1.40E+01	4
214	9.112	48.189	3	6.96E-01	1.97E+00	9.74E-01	6.96E-01	1.97E+00	1.48E+01	1.57E+01	5
216	9.062	46.820	4	7.08E-02	4.24E-01	9.91E-02	7.08E-02	4.24E-01	3.07E+00	3.17E+00	3
217	9.083	47.027	4	1.04E-01	4.82E-01	1.46E-01	1.04E-01	4.82E-01	3.52E+00	3.67E+00	3
218	9.051	47.019	4	8.96E-02	4.93E-01	1.25E-01	8.96E-02	4.93E-01	3.58E+00	3.70E+00	3
219	9.013	47.028	4	1.06E-01	4.74E-01	1.48E-01	1.06E-01	4.74E-01	3.47E+00	3.61E+00	3
220	8.964	47.019	4	9.30E-02	4.84E-01	1.30E-01	9.30E-02	4.84E-01	3.52E+00	3.65E+00	3
232	9.283	48.051	5	4.89E-01	1.11E+00	6.85E-01	4.89E-01	1.11E+00	8.45E+00	9.14E+00	4
233	9.076	48.344	5	8.17E-01	2.61E+00	1.14E+00	8.17E-01	2.61E+00	1.94E+01	2.06E+01	5
234	9.171	48.201	5	7.22E-01	2.02E+00	1.01E+00	7.22E-01	2.02E+00	1.52E+01	1.62E+01	5
236	9.223	48.060	5	6.04E-01	1.44E+00	8.46E-01	6.04E-01	1.44E+00	1.09E+01	1.18E+01	4
237	9.156	48.309	5	8.02E-01	2.46E+00	1.12E+00	8.02E-01	2.46E+00	1.83E+01	1.95E+01	5
238	8.987	48.346	5	8.17E-01	2.62E+00	1.14E+00	8.17E-01	2.62E+00	1.95E+01	2.06E+01	5
250	9.367	45.631	5	3.74E-07	0.00E+00	5.24E-07	3.74E-07	0.00E+00	5.24E-07	1.05E-06	1

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

251	9.378	45.682	5	4.20E-07	0.00E+00	5.88E-07	4.20E-07	0.00E+00	5.88E-07	1.18E-06	1
252	9.381	45.733	5	9.42E-07	0.00E+00	1.32E-06	9.42E-07	0.00E+00	1.32E-06	2.64E-06	1
253	8.778	49.558	4	1.59E+00	1.33E+01	2.23E+00	1.59E+00	1.33E+01	9.53E+01	9.76E+01	8
255	9.070	49.530	7	1.75E+00	1.45E+01	2.45E+00	1.75E+00	1.45E+01	1.04E+02	1.06E+02	8
261	9.121	46.815	2	7.32E-02	4.34E-01	1.02E-01	7.32E-02	4.34E-01	3.14E+00	3.24E+00	3
291	8.926	50.343	2	4.75E+00	8.18E+01	6.65E+00	4.75E+00	8.18E+01	5.79E+02	5.86E+02	8
297	9.070	47.086	5	1.18E-01	4.97E-01	1.65E-01	1.18E-01	4.97E-01	3.64E+00	3.81E+00	3
298	9.042	47.071	5	1.07E-01	5.02E-01	1.50E-01	1.07E-01	5.02E-01	3.66E+00	3.81E+00	3
299	8.995	47.083	5	1.23E-01	4.73E-01	1.72E-01	1.23E-01	4.73E-01	3.48E+00	3.66E+00	3
300	8.958	47.076	5	1.10E-01	5.01E-01	1.54E-01	1.10E-01	5.01E-01	3.66E+00	3.82E+00	3
304	8.733	49.028	4	6.51E-01	3.29E+00	9.11E-01	6.51E-01	3.29E+00	2.39E+01	2.49E+01	5
305	8.648	49.028	4	3.24E-02	4.18E-01	4.54E-02	3.24E-02	4.18E-01	2.97E+00	3.02E+00	3
306	8.827	49.020	4	1.15E+00	5.71E+00	1.61E+00	1.15E+00	5.71E+00	4.16E+01	4.32E+01	6
Case 2: Protected 12 rounds at aimpoint (8.95, 51.85)											
3	8.693	50.315	4	7.51E-03	2.03E+00	1.05E-02	2.15E-02	5.82E+00	4.08E+01	4.08E+01	6
4	9.225	50.221	4	1.53E-01	1.97E+01	2.14E-01	4.48E-01	5.63E+01	3.95E+02	3.95E+02	8
5	9.374	50.524	4	0.00E+00	8.70E-01	0.00E+00	4.18E-06	2.49E+00	1.74E+01	1.74E+01	5
6	9.225	50.524	4	1.03E-01	4.69E+01	1.44E-01	3.18E-01	1.34E+02	9.38E+02	9.39E+02	8
7	9.097	50.534	4	9.58E-02	5.59E+01	1.34E-01	3.01E-01	1.60E+02	1.12E+03	1.12E+03	8
8	8.954	50.542	4	1.06E-01	4.21E+01	1.48E-01	3.23E-01	1.20E+02	8.40E+02	8.41E+02	8
17	8.700	49.576	2	4.93E-02	1.21E+00	6.90E-02	1.41E-01	3.56E+00	2.51E+01	2.52E+01	5
18	9.008	49.534	2	2.39E-01	4.82E+00	3.35E-01	6.84E-01	1.41E+01	9.97E+01	1.00E+02	8
25	9.203	47.020	2	0.00E+00	0.00E+00	0.00E+00	3.50E-02	4.21E-01	3.00E+00	3.00E+00	2
27	9.010	46.883	2	0.00E+00	0.00E+00	0.00E+00	1.23E-02	4.15E-01	2.92E+00	2.92E+00	2
29	9.155	46.980	2	0.00E+00	0.00E+00	0.00E+00	1.99E-02	4.50E-01	3.18E+00	3.18E+00	3
32	9.162	45.542	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-01	1.02E+00	1.02E+00	2
33	9.134	45.693	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-01	1.05E+00	1.05E+00	2
34	9.236	45.448	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-01	8.26E-01	8.26E-01	2
36	9.184	45.669	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-01	1.02E+00	1.02E+00	2
50	9.107	49.460	2	2.47E-01	4.14E+00	3.46E-01	7.07E-01	1.22E+01	8.64E+01	8.67E+01	8
51	9.325	48.044	2	0.00E+00	0.00E+00	0.00E+00	2.17E-01	7.11E-01	5.28E+00	5.28E+00	3
52	9.035	48.198	2	7.57E-03	0.00E+00	1.06E-02	4.91E-01	1.88E+00	1.38E+01	1.39E+01	4
54	9.191	48.044	2	0.00E+00	0.00E+00	0.00E+00	4.14E-01	1.36E+00	1.01E+01	1.01E+01	4
70	9.286	45.768	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-02	2.23E-01	2.23E-01	1
99	8.667	49.854	9	1.19E-02	6.33E-01	1.67E-02	3.41E-02	1.83E+00	1.29E+01	1.29E+01	4
100	8.855	49.854	4	2.02E-01	8.33E+00	2.83E-01	5.82E-01	2.40E+01	1.69E+02	1.69E+02	8
101	8.983	49.851	9	2.08E-01	8.69E+00	2.91E-01	5.99E-01	2.51E+01	1.77E+02	1.77E+02	8
124	9.209	45.648	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	9.73E-01	9.73E-01	2
125	9.207	45.539	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-01	9.87E-01	9.87E-01	2
127	8.809	48.886	3	2.04E-01	6.18E-01	2.86E-01	6.40E-01	4.23E+00	3.05E+01	3.08E+01	6
128	9.059	46.875	4	0.00E+00	0.00E+00	0.00E+00	4.41E-03	4.09E-01	2.87E+00	2.87E+00	2
136	8.845	49.551	3	2.30E-01	4.80E+00	3.22E-01	6.61E-01	1.41E+01	9.96E+01	9.99E+01	8
137	8.931	49.541	3	2.33E-01	4.79E+00	3.26E-01	6.69E-01	1.40E+01	9.89E+01	9.93E+01	8
143	9.168	48.069	2	8.17E-04	0.00E+00	1.14E-03	4.32E-01	1.45E+00	1.08E+01	1.08E+01	4
144	9.281	48.111	3	2.14E-03	0.00E+00	3.00E-03	3.78E-01	1.20E+00	8.93E+00	8.93E+00	4
145	9.077	48.397	3	5.53E-02	0.00E+00	7.74E-02	5.42E-01	2.65E+00	1.93E+01	1.94E+01	5
146	9.170	48.242	3	8.17E-03	0.00E+00	1.14E-02	5.04E-01	2.01E+00	1.48E+01	1.48E+01	4
147	9.224	48.123	3	2.64E-03	0.00E+00	3.70E-03	4.51E-01	1.54E+00	1.14E+01	1.14E+01	4
149	9.103	48.033	3	0.00E+00	0.00E+00	0.00E+00	4.07E-01	1.33E+00	9.88E+00	9.88E+00	4
150	9.155	48.357	3	4.32E-02	0.00E+00	6.05E-02	5.37E-01	2.48E+00	1.81E+01	1.82E+01	5
161	9.225	46.968	2	0.00E+00	0.00E+00	0.00E+00	2.24E-02	3.93E-01	2.78E+00	2.78E+00	2
166	8.984	48.395	3	5.81E-02	0.00E+00	8.13E-02	5.39E-01	2.64E+00	1.92E+01	1.93E+01	5
171	9.409	49.498	4	0.00E+00	1.16E-01	0.00E+00	0.00E+00	3.45E-01	2.42E+00	2.42E+00	2
190	9.092	48.131	8	3.14E-03	0.00E+00	4.40E-03	4.43E-01	1.64E+00	1.21E+01	1.21E+01	4
191	9.196	46.746	2	0.00E+00	0.00E+00	0.00E+00	4.19E-03	3.73E-01	2.62E+00	2.62E+00	2
192	9.123	46.758	2	0.00E+00	0.00E+00	0.00E+00	2.77E-03	3.87E-01	2.71E+00	2.71E+00	2
200	9.182	45.726	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-01	1.02E+00	1.02E+00	2
202	9.294	45.449	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-02	8.96E-02	8.96E-02	1
204	9.256	48.008	2	0.00E+00	0.00E+00	0.00E+00	4.00E-01	1.14E+00	8.54E+00	8.54E+00	4
213	9.046	48.117	3	3.33E-03	0.00E+00	4.66E-03	4.54E-01	1.62E+00	1.20E+01	1.20E+01	4
214	9.112	48.189	3	5.47E-03	0.00E+00	7.66E-03	4.65E-01	1.83E+00	1.35E+01	1.35E+01	4
216	9.062	46.820	4	0.00E+00	0.00E+00	0.00E+00	1.94E-03	3.94E-01	2.76E+00	2.76E+00	2
217	9.083	47.027	4	0.00E+00	0.00E+00	0.00E+00	3.01E-02	4.48E-01	3.18E+00	3.18E+00	3
218	9.051	47.019	4	0.00E+00	0.00E+00	0.00E+00	1.70E-02	4.59E-01	3.24E+00	3.24E+00	3
219	9.013	47.028	4	0.00E+00	0.00E+00	0.00E+00	3.18E-02	4.41E-01	3.13E+00	3.13E+00	3
220	8.964	47.019	4	0.00E+00	0.00E+00	0.00E+00	2.18E-02	4.50E-01	3.18E+00	3.18E+00	3
232	9.283	48.051	5	3.49E-05	0.00E+00	4.89E-05	3.52E-01	1.03E+00	7.70E+00	7.70E+00	4
233	9.076	48.344	5	3.85E-02	0.00E+00	5.39E-02	5.27E-01	2.43E+00	1.77E+01	1.78E+01	5

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

234	9.171	48.201	5	6.39E-03	0.00E+00	8.95E-03	4.87E-01	1.88E+00	1.38E+01	1.39E+01	4
236	9.223	48.060	5	3.61E-04	0.00E+00	5.05E-04	4.25E-01	1.34E+00	9.98E+00	9.98E+00	4
237	9.156	48.309	5	2.79E-02	0.00E+00	3.91E-02	5.26E-01	2.29E+00	1.68E+01	1.68E+01	5
238	8.987	48.346	5	4.20E-02	0.00E+00	5.88E-02	5.26E-01	2.44E+00	1.78E+01	1.79E+01	5
253	8.778	49.558	4	2.17E-01	4.31E+00	3.04E-01	6.21E-01	1.26E+01	8.91E+01	8.94E+01	8
255	9.070	49.530	7	2.36E-01	4.72E+00	3.30E-01	6.77E-01	1.38E+01	9.75E+01	9.79E+01	8
261	9.121	46.815	2	0.00E+00	0.00E+00	0.00E+00	4.54E-03	4.04E-01	2.83E+00	2.83E+00	2
291	8.926	50.343	2	1.34E-01	2.73E+01	1.88E-01	3.97E-01	7.80E+01	5.47E+02	5.47E+02	8
297	9.070	47.086	5	0.00E+00	0.00E+00	0.00E+00	4.29E-02	4.62E-01	3.29E+00	3.29E+00	3
298	9.042	47.071	5	0.00E+00	0.00E+00	0.00E+00	3.35E-02	4.67E-01	3.32E+00	3.32E+00	3
299	8.995	47.083	5	0.00E+00	0.00E+00	0.00E+00	4.79E-02	4.40E-01	3.15E+00	3.15E+00	3
300	8.958	47.076	5	0.00E+00	0.00E+00	0.00E+00	3.59E-02	4.66E-01	3.31E+00	3.31E+00	3
304	8.733	49.028	4	1.27E-01	7.31E-01	1.78E-01	3.67E-01	3.11E+00	2.23E+01	2.25E+01	5
305	8.648	49.028	4	0.00E+00	7.06E-02	0.00E+00	0.00E+00	3.94E-01	2.76E+00	2.76E+00	2
306	8.827	49.020	4	2.23E-01	1.32E+00	3.12E-01	6.46E-01	5.40E+00	3.87E+01	3.90E+01	6

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 24 rounds at aimpoint (9.15, 52.00)											
4	9.225	50.221	4	7.24E+00	1.09E+02	1.01E+01	7.24E+00	1.09E+02	7.73E+02	7.83E+02	8
5	9.374	50.524	4	1.30E+01	2.50E+02	1.82E+01	1.30E+01	2.50E+02	1.77E+03	1.79E+03	8
6	9.225	50.524	4	1.29E+01	2.50E+02	1.81E+01	1.29E+01	2.50E+02	1.77E+03	1.79E+03	8
7	9.097	50.534	4	1.46E+01	2.92E+02	2.04E+01	1.46E+01	2.92E+02	2.06E+03	2.08E+03	8
8	8.954	50.542	4	1.13E+01	2.14E+02	1.58E+01	1.13E+01	2.14E+02	1.51E+03	1.53E+03	8
15	9.347	45.818	3	3.60E-01	4.18E-01	5.04E-01	3.60E-01	4.18E-01	3.43E+00	3.93E+00	3
16	9.315	45.716	2	3.12E-01	4.35E-01	4.37E-01	3.12E-01	4.35E-01	3.48E+00	3.92E+00	3
18	9.008	49.534	2	3.56E+00	2.66E+01	4.98E+00	3.56E+00	2.66E+01	1.91E+02	1.96E+02	8
25	9.203	47.020	2	1.27E+00	1.03E+00	1.78E+00	1.27E+00	1.03E+00	8.99E+00	1.08E+01	4
27	9.010	46.883	2	1.08E+00	8.32E-01	1.51E+00	1.08E+00	8.32E-01	7.34E+00	8.85E+00	4
29	9.155	46.980	2	1.24E+00	1.01E+00	1.74E+00	1.24E+00	1.01E+00	8.81E+00	1.05E+01	4
32	9.162	45.542	2	2.31E-01	4.57E-01	3.23E-01	2.31E-01	4.57E-01	3.52E+00	3.85E+00	3
33	9.134	45.693	1	3.18E-01	4.53E-01	4.45E-01	3.18E-01	4.53E-01	3.62E+00	4.06E+00	3
34	9.236	45.448	2	1.77E-01	4.37E-01	2.48E-01	1.77E-01	4.37E-01	3.31E+00	3.55E+00	3
36	9.184	45.669	1	3.02E-01	4.58E-01	4.23E-01	3.02E-01	4.58E-01	3.63E+00	4.05E+00	3
37	9.376	45.557	2	2.27E-01	4.26E-01	3.18E-01	2.27E-01	4.26E-01	3.30E+00	3.62E+00	3
41	9.312	45.638	2	2.71E-01	4.41E-01	3.79E-01	2.71E-01	4.41E-01	3.47E+00	3.85E+00	3
50	9.107	49.460	2	3.45E+00	2.42E+01	4.83E+00	3.45E+00	2.42E+01	1.74E+02	1.79E+02	8
51	9.325	48.044	2	1.89E+00	2.83E+00	2.65E+00	1.89E+00	2.83E+00	2.25E+01	2.51E+01	5
52	9.035	48.198	2	1.97E+00	3.56E+00	2.76E+00	1.97E+00	3.56E+00	2.77E+01	3.04E+01	6
54	9.191	48.044	2	1.88E+00	2.80E+00	2.63E+00	1.88E+00	2.80E+00	2.22E+01	2.49E+01	5
55	9.529	49.086	2	1.27E+00	6.18E+00	1.78E+00	1.27E+00	6.18E+00	4.50E+01	4.68E+01	6
56	9.628	49.104	2	4.02E-02	3.79E-01	5.63E-02	4.02E-02	3.79E-01	2.71E+00	2.77E+00	2
66	9.451	45.758	2	3.12E-01	3.36E-01	4.37E-01	3.12E-01	3.36E-01	2.79E+00	3.23E+00	3
70	9.286	45.768	3	3.38E-01	4.36E-01	4.73E-01	3.38E-01	4.36E-01	3.53E+00	4.00E+00	3
100	8.855	49.854	4	1.33E-01	1.58E+00	1.86E-01	1.33E-01	1.58E+00	1.12E+01	1.14E+01	4
101	8.983	49.851	9	4.31E+00	4.56E+01	6.03E+00	4.31E+00	4.56E+01	3.25E+02	3.31E+02	8
124	9.209	45.648	6	2.88E-01	4.59E-01	4.03E-01	2.88E-01	4.59E-01	3.62E+00	4.02E+00	3
125	9.207	45.539	4	2.33E-01	4.65E-01	3.26E-01	2.33E-01	4.65E-01	3.58E+00	3.91E+00	3
127	8.809	48.886	3	2.25E-02	1.34E-01	3.15E-02	2.25E-02	1.34E-01	9.70E-01	1.00E+00	2
128	9.059	46.875	4	1.15E+00	9.32E-01	1.61E+00	1.15E+00	9.32E-01	8.13E+00	9.74E+00	4
136	8.845	49.551	3	6.57E-02	8.58E-01	9.20E-02	6.57E-02	8.58E-01	6.10E+00	6.19E+00	4
137	8.931	49.541	3	1.95E+00	1.44E+01	2.73E+00	1.95E+00	1.44E+01	1.04E+02	1.06E+02	8
143	9.168	48.069	2	1.91E+00	2.97E+00	2.67E+00	1.91E+00	2.97E+00	2.35E+01	2.61E+01	5
144	9.281	48.111	3	1.94E+00	3.20E+00	2.72E+00	1.94E+00	3.20E+00	2.51E+01	2.78E+01	5
145	9.077	48.397	3	2.21E+00	5.29E+00	3.09E+00	2.21E+00	5.29E+00	4.01E+01	4.32E+01	6
146	9.170	48.242	3	2.06E+00	4.06E+00	2.88E+00	2.06E+00	4.06E+00	3.13E+01	3.42E+01	6
147	9.224	48.123	3	1.95E+00	3.27E+00	2.73E+00	1.95E+00	3.27E+00	2.56E+01	2.84E+01	5
149	9.103	48.033	3	1.88E+00	2.73E+00	2.63E+00	1.88E+00	2.73E+00	2.17E+01	2.44E+01	5
150	9.155	48.357	3	2.19E+00	5.00E+00	3.07E+00	2.19E+00	5.00E+00	3.81E+01	4.11E+01	6
161	9.225	46.968	2	1.24E+00	1.01E+00	1.74E+00	1.24E+00	1.01E+00	8.81E+00	1.05E+01	4
163	9.628	49.378	3	3.21E-02	4.23E-01	4.49E-02	3.21E-02	4.23E-01	3.01E+00	3.05E+00	3

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

166	8.984	48.395	3	1.85E+00	4.24E+00	2.59E+00	1.85E+00	4.24E+00	3.23E+01	3.49E+01	6
167	9.347	45.802	3	3.52E-01	4.17E-01	4.93E-01	3.52E-01	4.17E-01	3.41E+00	3.90E+00	3
170	9.510	49.506	4	2.35E+00	1.74E+01	3.29E+00	2.35E+00	1.74E+01	1.25E+02	1.28E+02	8
171	9.409	49.498	4	3.53E+00	2.58E+01	4.94E+00	3.53E+00	2.58E+01	1.86E+02	1.90E+02	8
190	9.092	48.131	8	1.96E+00	3.28E+00	2.74E+00	1.96E+00	3.28E+00	2.57E+01	2.84E+01	5
191	9.196	46.746	2	1.07E+00	9.04E-01	1.50E+00	1.07E+00	9.04E-01	7.83E+00	9.32E+00	4
192	9.123	46.758	2	1.07E+00	9.13E-01	1.50E+00	1.07E+00	9.13E-01	7.89E+00	9.39E+00	4
200	9.182	45.726	2	3.32E-01	4.49E-01	4.65E-01	3.32E-01	4.49E-01	3.61E+00	4.07E+00	3
201	9.312	45.828	2	3.71E-01	4.36E-01	5.19E-01	3.71E-01	4.36E-01	3.57E+00	4.09E+00	3
202	9.294	45.449	2	1.85E-01	4.56E-01	2.59E-01	1.85E-01	4.56E-01	3.45E+00	3.71E+00	3
203	9.405	45.436	2	1.64E-01	4.30E-01	2.30E-01	1.64E-01	4.30E-01	3.24E+00	3.47E+00	3
204	9.256	48.008	2	1.86E+00	2.63E+00	2.60E+00	1.86E+00	2.63E+00	2.10E+01	2.36E+01	5
213	9.046	48.117	3	1.94E+00	3.21E+00	2.72E+00	1.94E+00	3.21E+00	2.52E+01	2.79E+01	5
214	9.112	48.189	3	2.01E+00	3.61E+00	2.81E+00	2.01E+00	3.61E+00	2.81E+01	3.09E+01	6
216	9.062	46.820	4	1.11E+00	9.11E-01	1.55E+00	1.11E+00	9.11E-01	7.93E+00	9.49E+00	4
217	9.083	47.027	4	1.28E+00	1.02E+00	1.79E+00	1.28E+00	1.02E+00	8.93E+00	1.07E+01	4
218	9.051	47.019	4	1.27E+00	9.89E-01	1.78E+00	1.27E+00	9.89E-01	8.70E+00	1.05E+01	4
219	9.013	47.028	4	1.18E+00	8.91E-01	1.65E+00	1.18E+00	8.91E-01	7.89E+00	9.54E+00	4
220	8.964	47.019	4	9.02E-01	7.00E-01	1.26E+00	9.02E-01	7.00E-01	6.16E+00	7.43E+00	4
232	9.283	48.051	5	1.89E+00	2.86E+00	2.65E+00	1.89E+00	2.86E+00	2.27E+01	2.53E+01	5
233	9.076	48.344	5	2.16E+00	4.85E+00	3.02E+00	2.16E+00	4.85E+00	3.70E+01	4.00E+01	6
234	9.171	48.201	5	2.02E+00	3.73E+00	2.83E+00	2.02E+00	3.73E+00	2.89E+01	3.18E+01	6
236	9.223	48.060	5	1.90E+00	2.91E+00	2.66E+00	1.90E+00	2.91E+00	2.30E+01	2.57E+01	5
237	9.156	48.309	5	2.14E+00	4.61E+00	3.00E+00	2.14E+00	4.61E+00	3.53E+01	3.83E+01	6
238	8.987	48.346	5	1.84E+00	3.98E+00	2.58E+00	1.84E+00	3.98E+00	3.04E+01	3.30E+01	6
250	9.367	45.631	5	2.67E-01	4.22E-01	3.74E-01	2.67E-01	4.22E-01	3.33E+00	3.70E+00	3
251	9.378	45.682	5	2.87E-01	4.25E-01	4.02E-01	2.87E-01	4.25E-01	3.38E+00	3.78E+00	3
252	9.381	45.733	5	3.10E-01	4.25E-01	4.34E-01	3.10E-01	4.25E-01	3.41E+00	3.84E+00	3
253	8.778	49.558	4	1.34E-05	0.00E+00	1.88E-05	1.34E-05	0.00E+00	1.88E-05	3.75E-05	1
255	9.070	49.530	7	3.55E+00	2.69E+01	4.97E+00	3.55E+00	2.69E+01	1.93E+02	1.98E+02	8
261	9.121	46.815	2	1.12E+00	9.54E-01	1.57E+00	1.12E+00	9.54E-01	8.25E+00	9.81E+00	4
286	9.424	45.654	2	2.65E-01	3.85E-01	3.71E-01	2.65E-01	3.85E-01	3.07E+00	3.44E+00	3
291	8.926	50.343	2	4.15E+00	6.64E+01	5.81E+00	4.15E+00	6.64E+01	4.71E+02	4.76E+02	8
297	9.070	47.086	5	1.32E+00	1.03E+00	1.85E+00	1.32E+00	1.03E+00	9.06E+00	1.09E+01	4
298	9.042	47.071	5	1.28E+00	9.90E-01	1.79E+00	1.28E+00	9.90E-01	8.72E+00	1.05E+01	4
299	8.995	47.083	5	1.14E+00	8.38E-01	1.60E+00	1.14E+00	8.38E-01	7.46E+00	9.06E+00	4
300	8.958	47.076	5	8.90E-01	6.87E-01	1.25E+00	8.90E-01	6.87E-01	6.06E+00	7.30E+00	4
306	8.827	49.020	4	6.20E-02	4.29E-01	8.68E-02	6.20E-02	4.29E-01	3.09E+00	3.18E+00	3

Case 2: Protected 24 rounds at aimpoint (9.15, 52.00)

4	9.225	50.221	4	3.46E-01	3.62E+01	4.84E-01	1.01E+00	1.03E+02	7.22E+02	7.23E+02	8
5	9.374	50.524	4	2.37E-01	8.35E+01	3.32E-01	7.24E-01	2.39E+02	1.67E+03	1.67E+03	8
6	9.225	50.524	4	2.37E-01	8.35E+01	3.32E-01	7.22E-01	2.39E+02	1.67E+03	1.67E+03	8
7	9.097	50.534	4	2.26E-01	9.74E+01	3.16E-01	6.97E-01	2.79E+02	1.95E+03	1.95E+03	8
8	8.954	50.542	4	2.35E-01	7.14E+01	3.29E-01	7.18E-01	2.04E+02	1.43E+03	1.43E+03	8
15	9.347	45.818	3	0.00E+00	0.00E+00	0.00E+00	2.86E-01	3.89E-01	3.12E+00	3.12E+00	3
16	9.315	45.716	2	0.00E+00	0.00E+00	0.00E+00	2.41E-01	4.05E-01	3.17E+00	3.17E+00	3
18	9.008	49.534	2	5.47E-01	8.61E+00	7.66E-01	1.57E+00	2.54E+01	1.80E+02	1.81E+02	8
25	9.203	47.020	2	0.00E+00	0.00E+00	0.00E+00	1.06E+00	9.58E-01	8.19E+00	8.19E+00	4
27	9.010	46.883	2	0.00E+00	0.00E+00	0.00E+00	9.05E-01	7.74E-01	6.69E+00	6.69E+00	4
29	9.155	46.980	2	0.00E+00	0.00E+00	0.00E+00	1.04E+00	9.42E-01	8.05E+00	8.05E+00	4
32	9.162	45.542	2	0.00E+00	0.00E+00	0.00E+00	1.52E-01	4.25E-01	3.19E+00	3.19E+00	3
33	9.134	45.693	1	0.00E+00	0.00E+00	0.00E+00	2.37E-01	4.21E-01	3.28E+00	3.28E+00	3
34	9.236	45.448	2	0.00E+00	0.00E+00	0.00E+00	1.11E-01	4.06E-01	3.00E+00	3.00E+00	2
36	9.184	45.669	1	0.00E+00	0.00E+00	0.00E+00	2.20E-01	4.26E-01	3.29E+00	3.29E+00	3
37	9.376	45.557	2	0.00E+00	0.00E+00	0.00E+00	1.61E-01	3.96E-01	3.00E+00	3.00E+00	2
41	9.312	45.638	2	0.00E+00	0.00E+00	0.00E+00	2.02E-01	4.10E-01	3.15E+00	3.15E+00	3
50	9.107	49.460	2	5.53E-01	7.75E+00	7.74E-01	1.59E+00	2.30E+01	1.63E+02	1.64E+02	8
51	9.325	48.044	2	4.36E-03	0.00E+00	6.10E-03	1.49E+00	2.63E+00	2.05E+01	2.05E+01	5
52	9.035	48.198	2	2.67E-02	0.00E+00	3.74E-02	1.50E+00	3.31E+00	2.53E+01	2.53E+01	5
54	9.191	48.044	2	5.14E-03	0.00E+00	7.20E-03	1.48E+00	2.61E+00	2.03E+01	2.03E+01	5
55	9.529	49.086	2	2.47E-01	1.53E+00	3.46E-01	7.44E-01	5.85E+00	4.20E+01	4.23E+01	6
56	9.628	49.104	2	2.49E-03	9.59E-02	3.49E-03	8.29E-03	3.59E-01	2.52E+00	2.53E+00	2
66	9.451	45.758	2	0.00E+00	0.00E+00	0.00E+00	2.57E-01	3.12E-01	2.54E+00	2.54E+00	2
70	9.286	45.768	3	0.00E+00	0.00E+00	0.00E+00	2.64E-01	4.05E-01	3.20E+00	3.20E+00	3
100	8.855	49.854	4	9.11E-03	5.20E-01	1.28E-02	2.60E-02	1.51E+00	1.06E+01	1.06E+01	4
101	8.983	49.851	9	4.51E-01	1.50E+01	6.31E-01	1.29E+00	4.34E+01	3.06E+02	3.06E+02	8
124	9.209	45.648	6	0.00E+00	0.00E+00	0.00E+00	2.08E-01	4.26E-01	3.27E+00	3.27E+00	3
125	9.207	45.539	4	0.00E+00	0.00E+00	0.00E+00	1.53E-01	4.33E-01	3.25E+00	3.25E+00	3

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

127	8.809	48.886	3	1.59E-03	8.05E-03	2.23E-03	9.03E-03	1.25E-01	8.88E-01	8.90E-01	2
128	9.059	46.875	4	0.00E+00	0.00E+00	0.00E+00	9.55E-01	8.66E-01	7.40E+00	7.40E+00	4
136	8.845	49.551	3	4.33E-04	2.73E-01	6.06E-04	1.24E-03	8.17E-01	5.72E+00	5.72E+00	3
137	8.931	49.541	3	3.03E-01	4.66E+00	4.24E-01	8.68E-01	1.38E+01	9.78E+01	9.82E+01	8
143	9.168	48.069	2	8.14E-03	0.00E+00	1.14E-02	1.49E+00	2.76E+00	2.14E+01	2.14E+01	5
144	9.281	48.111	3	1.12E-02	0.00E+00	1.57E-02	1.51E+00	2.98E+00	2.30E+01	2.30E+01	5
145	9.077	48.397	3	1.27E-01	0.00E+00	1.78E-01	1.58E+00	4.92E+00	3.67E+01	3.68E+01	6
146	9.170	48.242	3	4.36E-02	0.00E+00	6.10E-02	1.55E+00	3.77E+00	2.86E+01	2.86E+01	5
147	9.224	48.123	3	1.29E-02	0.00E+00	1.81E-02	1.51E+00	3.04E+00	2.34E+01	2.34E+01	5
149	9.103	48.033	3	4.55E-03	0.00E+00	6.37E-03	1.48E+00	2.54E+00	1.99E+01	1.99E+01	5
150	9.155	48.357	3	1.03E-01	0.00E+00	1.44E-01	1.58E+00	4.65E+00	3.48E+01	3.49E+01	6
161	9.225	46.968	2	0.00E+00	0.00E+00	0.00E+00	1.03E+00	9.41E-01	8.03E+00	8.03E+00	4
163	9.628	49.378	3	1.95E-04	1.32E-01	2.73E-04	5.58E-04	4.03E-01	2.82E+00	2.82E+00	2
166	8.984	48.395	3	1.14E-01	0.00E+00	1.60E-01	1.35E+00	3.94E+00	2.95E+01	2.96E+01	5
167	9.347	45.802	3	0.00E+00	0.00E+00	0.00E+00	2.78E-01	3.87E-01	3.10E+00	3.10E+00	3
170	9.510	49.506	4	3.66E-01	5.61E+00	5.12E-01	1.05E+00	1.66E+01	1.18E+02	1.18E+02	8
171	9.409	49.498	4	5.54E-01	8.29E+00	7.76E-01	1.59E+00	2.45E+01	1.74E+02	1.75E+02	8
190	9.092	48.131	8	1.57E-02	0.00E+00	2.20E-02	1.51E+00	3.05E+00	2.35E+01	2.35E+01	5
191	9.196	46.746	2	0.00E+00	0.00E+00	0.00E+00	8.82E-01	8.41E-01	7.12E+00	7.12E+00	4
192	9.123	46.758	2	0.00E+00	0.00E+00	0.00E+00	8.82E-01	8.49E-01	7.18E+00	7.18E+00	4
200	9.182	45.726	2	0.00E+00	0.00E+00	0.00E+00	2.53E-01	4.18E-01	3.28E+00	3.28E+00	3
201	9.312	45.828	2	0.00E+00	0.00E+00	0.00E+00	2.95E-01	4.05E-01	3.25E+00	3.25E+00	3
202	9.294	45.449	2	0.00E+00	0.00E+00	0.00E+00	1.11E-01	4.24E-01	3.12E+00	3.12E+00	3
203	9.405	45.436	2	0.00E+00	0.00E+00	0.00E+00	1.04E-01	4.00E-01	2.95E+00	2.95E+00	2
204	9.256	48.008	2	9.51E-04	0.00E+00	1.33E-03	1.48E+00	2.45E+00	1.92E+01	1.92E+01	5
213	9.046	48.117	3	1.62E-02	0.00E+00	2.27E-02	1.50E+00	2.98E+00	2.30E+01	2.30E+01	5
214	9.112	48.189	3	2.19E-02	0.00E+00	3.07E-02	1.53E+00	3.36E+00	2.57E+01	2.57E+01	5
216	9.062	46.820	4	0.00E+00	0.00E+00	0.00E+00	9.18E-01	8.47E-01	7.21E+00	7.21E+00	4
217	9.083	47.027	4	0.00E+00	0.00E+00	0.00E+00	1.06E+00	9.47E-01	8.11E+00	8.11E+00	4
218	9.051	47.019	4	0.00E+00	0.00E+00	0.00E+00	1.05E+00	9.20E-01	7.91E+00	7.91E+00	4
219	9.013	47.028	4	0.00E+00	0.00E+00	0.00E+00	9.88E-01	8.29E-01	7.19E+00	7.19E+00	4
220	8.964	47.019	4	0.00E+00	0.00E+00	0.00E+00	7.57E-01	6.51E-01	5.62E+00	5.62E+00	3
232	9.283	48.051	5	5.43E-03	0.00E+00	7.60E-03	1.49E+00	2.66E+00	2.07E+01	2.07E+01	5
233	9.076	48.344	5	9.97E-02	0.00E+00	1.40E-01	1.57E+00	4.52E+00	3.38E+01	3.40E+01	6
234	9.171	48.201	5	2.31E-02	0.00E+00	3.23E-02	1.54E+00	3.47E+00	2.64E+01	2.65E+01	5
236	9.223	48.060	5	6.55E-03	0.00E+00	9.17E-03	1.49E+00	2.71E+00	2.11E+01	2.11E+01	5
237	9.156	48.309	5	7.90E-02	0.00E+00	1.11E-01	1.57E+00	4.29E+00	3.22E+01	3.23E+01	6
238	8.987	48.346	5	9.25E-02	0.00E+00	1.30E-01	1.36E+00	3.70E+00	2.78E+01	2.79E+01	5
250	9.367	45.631	5	0.00E+00	0.00E+00	0.00E+00	1.98E-01	3.93E-01	3.03E+00	3.03E+00	3
251	9.378	45.682	5	0.00E+00	0.00E+00	0.00E+00	2.17E-01	3.95E-01	3.07E+00	3.07E+00	3
252	9.381	45.733	5	0.00E+00	0.00E+00	0.00E+00	2.39E-01	3.95E-01	3.10E+00	3.10E+00	3
255	9.070	49.530	7	5.38E-01	8.67E+00	7.53E-01	1.54E+00	2.56E+01	1.81E+02	1.82E+02	8
261	9.121	46.815	2	0.00E+00	0.00E+00	0.00E+00	9.20E-01	8.87E-01	7.50E+00	7.50E+00	4
286	9.424	45.654	2	0.00E+00	0.00E+00	0.00E+00	2.05E-01	3.58E-01	2.79E+00	2.79E+00	2
291	8.926	50.343	2	1.62E-01	2.21E+01	2.27E-01	4.76E-01	6.33E+01	4.44E+02	4.44E+02	8
297	9.070	47.086	5	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.55E-01	8.23E+00	8.23E+00	4
298	9.042	47.071	5	0.00E+00	0.00E+00	0.00E+00	1.07E+00	9.20E-01	7.94E+00	7.94E+00	4
299	8.995	47.083	5	0.00E+00	0.00E+00	0.00E+00	9.63E-01	7.79E-01	6.80E+00	6.80E+00	4
300	8.958	47.076	5	0.00E+00	0.00E+00	0.00E+00	7.49E-01	6.39E-01	5.52E+00	5.52E+00	3
306	8.827	49.020	4	5.81E-03	6.31E-02	8.13E-03	2.22E-02	4.04E-01	2.86E+00	2.87E+00	2

VX 250kg TBM
Light Attack
Height of Release: 500m

				Height of Release: 500m							
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected				1 round at aimpoint (10.40, 52.00)							
30	10.093	49.471	2	1.10E-02	0.00E+00	1.54E-02	1.10E-02	0.00E+00	1.54E-02	3.08E-02	1
40	10.792	42.386	5	1.80E-01	3.36E+00	2.52E-01	1.80E-01	3.36E+00	2.38E+01	2.40E+01	5
43	10.740	42.320	1	2.74E-01	4.76E+00	3.84E-01	2.74E-01	4.76E+00	3.37E+01	3.41E+01	6
44	10.438	42.496	2	6.89E-01	1.36E+01	9.65E-01	6.89E-01	1.36E+01	9.62E+01	9.71E+01	8
48	10.165	46.551	1	5.91E-01	1.55E+01	8.27E-01	5.91E-01	1.55E+01	1.09E+02	1.10E+02	8
71	10.734	42.486	1	2.87E-01	5.02E+00	4.02E-01	2.87E-01	5.02E+00	3.55E+01	3.59E+01	6
72	10.680	42.398	1	3.75E-01	6.71E+00	5.25E-01	3.75E-01	6.71E+00	4.75E+01	4.80E+01	6

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

73	10.841	42.495	1	1.40E-01	2.31E+00	1.96E-01	1.40E-01	2.31E+00	1.64E+01	1.66E+01	5
75	10.670	50.291	3	3.49E-03	0.00E+00	4.89E-03	3.49E-03	0.00E+00	4.89E-03	9.77E-03	1
90	10.433	50.482	9	2.35E+00	1.42E+02	3.29E+00	2.35E+00	1.42E+02	9.97E+02	1.00E+03	8
91	10.532	50.469	9	1.24E-01	2.41E+00	1.74E-01	1.24E-01	2.41E+00	1.70E+01	1.72E+01	5
92	10.618	50.471	4	8.67E-05	0.00E+00	1.21E-04	8.67E-05	0.00E+00	1.21E-04	2.43E-04	1
102	10.494	46.773	3	1.40E+00	4.11E+01	1.96E+00	1.40E+00	4.11E+01	2.90E+02	2.92E+02	8
103	9.999	46.817	1	9.86E-02	1.39E+00	1.38E-01	9.86E-02	1.39E+00	9.87E+00	1.00E+01	4
104	10.012	47.018	4	1.02E-01	1.64E+00	1.43E-01	1.02E-01	1.64E+00	1.16E+01	1.18E+01	4
105	10.124	47.005	4	3.48E-01	9.71E+00	4.87E-01	3.48E-01	9.71E+00	6.85E+01	6.89E+01	7
106	10.228	47.008	2	9.39E-01	2.77E+01	1.31E+00	9.39E-01	2.77E+01	1.95E+02	1.97E+02	8
107	10.338	46.997	4	1.55E+00	4.93E+01	2.17E+00	1.55E+00	4.93E+01	3.47E+02	3.49E+02	8
108	10.752	46.815	4	1.67E-01	3.43E+00	2.34E-01	1.67E-01	3.43E+00	2.42E+01	2.45E+01	5
109	10.818	46.635	4	9.15E-02	1.20E+00	1.28E-01	9.15E-02	1.20E+00	8.53E+00	8.66E+00	4
110	10.859	46.478	4	5.00E-02	5.10E-01	7.00E-02	5.00E-02	5.10E-01	3.64E+00	3.71E+00	3
111	10.656	46.929	2	4.60E-01	1.22E+01	6.44E-01	4.60E-01	1.22E+01	8.60E+01	8.67E+01	8
112	10.708	46.424	4	2.66E-01	7.21E+00	3.72E-01	2.66E-01	7.21E+00	5.08E+01	5.12E+01	7
113	10.612	46.387	4	7.11E-01	1.86E+01	9.95E-01	7.11E-01	1.86E+01	1.31E+02	1.32E+02	8
114	10.539	46.317	2	1.09E+00	2.95E+01	1.53E+00	1.09E+00	2.95E+01	2.08E+02	2.10E+02	8
115	10.400	46.322	4	1.52E+00	4.25E+01	2.13E+00	1.52E+00	4.25E+01	3.00E+02	3.02E+02	8
116	10.166	49.480	5	9.00E-02	1.25E+00	1.26E-01	9.00E-02	1.25E+00	8.88E+00	9.00E+00	4
117	10.234	49.391	3	5.75E-01	1.60E+01	8.05E-01	5.75E-01	1.60E+01	1.13E+02	1.14E+02	8
130	10.790	42.307	3	1.83E-01	3.42E+00	2.56E-01	1.83E-01	3.42E+00	2.42E+01	2.45E+01	5
131	10.723	42.397	2	3.07E-01	5.30E+00	4.30E-01	3.07E-01	5.30E+00	3.75E+01	3.80E+01	6
135	10.895	42.320	2	1.13E-01	1.47E+00	1.58E-01	1.13E-01	1.47E+00	1.04E+01	1.06E+01	4
140	11.090	42.435	2	7.82E-03	0.00E+00	1.09E-02	7.82E-03	0.00E+00	1.09E-02	2.19E-02	1
141	10.957	42.331	2	9.01E-02	6.99E-01	1.26E-01	9.01E-02	6.99E-01	5.02E+00	5.15E+00	3
142	10.598	42.284	2	4.77E-01	9.46E+00	6.68E-01	4.77E-01	9.46E+00	6.69E+01	6.76E+01	7
151	10.364	46.506	2	1.49E+00	4.37E+01	2.09E+00	1.49E+00	4.37E+01	3.08E+02	3.10E+02	8
152	10.429	46.678	6	1.57E+00	4.68E+01	2.20E+00	1.57E+00	4.68E+01	3.30E+02	3.32E+02	8
153	10.617	46.667	4	6.76E-01	1.84E+01	9.46E-01	6.76E-01	1.84E+01	1.30E+02	1.31E+02	8
155	10.362	46.610	4	1.52E+00	4.52E+01	2.13E+00	1.52E+00	4.52E+01	3.19E+02	3.21E+02	8
157	11.013	42.282	2	6.24E-02	2.69E-01	8.74E-02	6.24E-02	2.69E-01	1.97E+00	2.06E+00	2
158	10.148	49.313	4	1.07E-01	6.40E-01	1.50E-01	1.07E-01	6.40E-01	4.63E+00	4.78E+00	3
164	10.250	46.682	3	1.06E+00	3.03E+01	1.48E+00	1.06E+00	3.03E+01	2.14E+02	2.15E+02	8
172	10.079	49.696	4	3.09E-05	0.00E+00	4.33E-05	3.09E-05	0.00E+00	4.33E-05	8.65E-05	1
174	10.064	46.471	4	2.19E-01	5.06E+00	3.07E-01	2.19E-01	5.06E+00	3.57E+01	3.60E+01	6
175	9.819	46.598	4	1.41E-05	0.00E+00	1.97E-05	1.41E-05	0.00E+00	1.97E-05	3.95E-05	1
176	10.057	46.658	4	1.93E-01	4.30E+00	2.70E-01	1.93E-01	4.30E+00	3.04E+01	3.06E+01	6
177	9.973	46.643	4	8.11E-02	9.90E-01	1.14E-01	8.11E-02	9.90E-01	7.04E+00	7.16E+00	4
180	10.861	43.129	4	1.03E-01	1.92E+00	1.44E-01	1.03E-01	1.92E+00	1.36E+01	1.37E+01	4
182	10.559	43.004	4	5.88E-01	1.23E+01	8.23E-01	5.88E-01	1.23E+01	8.69E+01	8.77E+01	8
195	10.224	46.931	2	9.11E-01	2.66E+01	1.28E+00	9.11E-01	2.66E+01	1.87E+02	1.89E+02	8
196	10.654	46.844	2	4.76E-01	1.26E+01	6.66E-01	4.76E-01	1.26E+01	8.89E+01	8.95E+01	8
197	10.503	46.322	2	1.29E+00	3.48E+01	1.81E+00	1.29E+00	3.48E+01	2.45E+02	2.47E+02	8
198	9.994	46.745	2	9.81E-02	1.36E+00	1.37E-01	9.81E-02	1.36E+00	9.66E+00	9.79E+00	4
199	10.245	46.833	2	1.04E+00	3.03E+01	1.46E+00	1.04E+00	3.03E+01	2.14E+02	2.15E+02	8
206	10.774	42.454	2	2.13E-01	3.85E+00	2.98E-01	2.13E-01	3.85E+00	2.72E+01	2.75E+01	5
207	10.948	42.402	2	9.49E-02	7.76E-01	1.33E-01	9.49E-02	7.76E-01	5.56E+00	5.70E+00	3
208	11.091	42.478	2	6.77E-03	0.00E+00	9.48E-03	6.77E-03	0.00E+00	9.48E-03	1.90E-02	1
209	10.869	42.349	2	1.27E-01	1.85E+00	1.78E-01	1.27E-01	1.85E+00	1.31E+01	1.33E+01	4
211	10.748	42.548	2	2.61E-01	4.62E+00	3.65E-01	2.61E-01	4.62E+00	3.27E+01	3.31E+01	6
226	10.758	42.201	4	2.40E-01	4.25E+00	3.36E-01	2.40E-01	4.25E+00	3.01E+01	3.04E+01	6
227	10.836	42.132	4	1.46E-01	2.44E+00	2.04E-01	1.46E-01	2.44E+00	1.73E+01	1.75E+01	5
228	10.859	42.183	4	1.34E-01	2.04E+00	1.88E-01	1.34E-01	2.04E+00	1.45E+01	1.47E+01	4
229	10.939	42.475	4	9.26E-02	8.85E-01	1.30E-01	9.26E-02	8.85E-01	6.32E+00	6.45E+00	4
235	10.014	46.937	5	1.11E-01	1.84E+00	1.55E-01	1.11E-01	1.84E+00	1.30E+01	1.32E+01	4
239	10.579	46.422	5	8.87E-01	2.38E+01	1.24E+00	8.87E-01	2.38E+01	1.68E+02	1.69E+02	8
240	10.491	42.450	5	6.59E-01	1.27E+01	9.23E-01	6.59E-01	1.27E+01	8.98E+01	9.07E+01	8
241	10.706	46.484	5	2.63E-01	7.26E+00	3.68E-01	2.63E-01	7.26E+00	5.12E+01	5.16E+01	7
242	10.798	46.470	5	1.25E-01	1.94E+00	1.75E-01	1.25E-01	1.94E+00	1.38E+01	1.39E+01	4
243	10.126	46.910	5	3.66E-01	1.01E+01	5.12E-01	3.66E-01	1.01E+01	7.12E+01	7.17E+01	7
244	10.336	46.922	5	1.53E+00	4.77E+01	2.14E+00	1.53E+00	4.77E+01	3.36E+02	3.38E+02	8
245	10.750	46.730	5	1.76E-01	3.66E+00	2.46E-01	1.76E-01	3.66E+00	2.59E+01	2.61E+01	5
246	10.818	46.559	5	9.56E-02	1.29E+00	1.34E-01	9.56E-02	1.29E+00	9.16E+00	9.30E+00	4
247	10.846	42.387	5	1.39E-01	2.21E+00	1.95E-01	1.39E-01	2.21E+00	1.57E+01	1.59E+01	5
248	10.955	42.100	5	8.34E-02	7.38E-01	1.17E-01	8.34E-02	7.38E-01	5.28E+00	5.40E+00	3
249	10.362	46.339	5	1.44E+00	4.12E+01	2.02E+00	1.44E+00	4.12E+01	2.90E+02	2.92E+02	8
264	10.880	42.213	6	1.22E-01	1.72E+00	1.71E-01	1.22E-01	1.72E+00	1.22E+01	1.24E+01	4

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

265	11.038	42.174	3	3.97E-02	9.67E-02	5.56E-02	3.97E-02	9.67E-02	7.32E-01	7.88E-01	2
269	10.759	42.060	2	2.36E-01	4.09E+00	3.30E-01	2.36E-01	4.09E+00	2.90E+01	2.93E+01	5
270	11.077	42.122	2	1.39E-02	4.48E-03	1.95E-02	1.39E-02	4.48E-03	5.08E-02	7.03E-02	1
273	10.992	42.130	4	6.51E-02	4.41E-01	9.11E-02	6.51E-02	4.41E-01	3.18E+00	3.27E+00	3
274	10.943	42.205	4	9.23E-02	8.55E-01	1.29E-01	9.23E-02	8.55E-01	6.11E+00	6.24E+00	4
275	10.922	42.146	4	1.02E-01	1.13E+00	1.43E-01	1.02E-01	1.13E+00	8.05E+00	8.20E+00	4
276	11.113	42.169	4	5.68E-05	0.00E+00	7.95E-05	5.68E-05	0.00E+00	7.95E-05	1.59E-04	1
277	10.886	42.648	1	1.03E-01	1.55E+00	1.44E-01	1.03E-01	1.55E+00	1.10E+01	1.11E+01	4
278	10.882	42.109	1	1.23E-01	1.68E+00	1.72E-01	1.23E-01	1.68E+00	1.19E+01	1.21E+01	4
279	11.151	42.140	1	3.13E-05	0.00E+00	4.38E-05	3.13E-05	0.00E+00	4.38E-05	8.76E-05	1
280	11.031	42.559	2	4.74E-02	1.17E-01	6.64E-02	4.74E-02	1.17E-01	8.85E-01	9.52E-01	2
281	10.438	42.395	2	6.78E-01	1.33E+01	9.49E-01	6.78E-01	1.33E+01	9.40E+01	9.50E+01	8
282	10.719	42.175	2	3.08E-01	5.36E+00	4.31E-01	3.08E-01	5.36E+00	3.80E+01	3.84E+01	6
284	10.749	42.595	2	2.59E-01	4.62E+00	3.63E-01	2.59E-01	4.62E+00	3.27E+01	3.31E+01	6
285	9.931	47.046	2	2.62E-02	0.00E+00	3.67E-02	2.62E-02	0.00E+00	3.67E-02	7.34E-02	1
309	10.450	46.852	4	1.56E+00	4.86E+01	2.18E+00	1.56E+00	4.86E+01	3.42E+02	3.45E+02	8
321	11.110	42.321	1	6.51E-05	0.00E+00	9.11E-05	6.51E-05	0.00E+00	9.11E-05	1.82E-04	1
322	10.514	42.291	4	6.18E-01	1.19E+01	8.65E-01	6.18E-01	1.19E+01	8.42E+01	8.50E+01	8
323	10.517	42.409	3	6.24E-01	1.20E+01	8.74E-01	6.24E-01	1.20E+01	8.49E+01	8.57E+01	8
324	10.448	42.294	3	6.64E-01	1.30E+01	9.30E-01	6.64E-01	1.30E+01	9.19E+01	9.29E+01	8
325	10.492	42.500	9	6.61E-01	1.29E+01	9.25E-01	6.61E-01	1.29E+01	9.12E+01	9.22E+01	8

Case 2: Protected 1 round at aimpoint (10.65, 43.95)

40	10.792	42.386	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-01	3.31E+00	3.31E+00	3
43	10.740	42.320	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E+00	6.45E+01	6.45E+01	7
71	10.734	42.486	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E+01	1.45E+02	1.45E+02	8
72	10.680	42.398	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.01E+01	5.61E+02	5.61E+02	8
130	10.790	42.307	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-01	3.54E+00	3.54E+00	3
131	10.723	42.397	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E+01	1.90E+02	1.90E+02	8
142	10.598	42.284	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E+01	1.86E+02	1.86E+02	8
182	10.559	43.004	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.46E-01	6.62E+00	6.62E+00	4
206	10.774	42.454	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E+00	8.96E+00	8.96E+00	4
211	10.748	42.548	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E+00	3.12E+01	3.12E+01	6
226	10.758	42.201	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-01	4.82E+00	4.82E+00	3
282	10.719	42.175	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E+00	2.35E+01	2.35E+01	5
284	10.749	42.595	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E+00	1.79E+01	1.79E+01	5
322	10.514	42.291	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-01	4.45E+00	4.45E+00	3
323	10.517	42.409	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-01	6.64E+00	6.64E+00	4

VX 500kg TBM
Moderate Attack
Height of Release:800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 2 rounds at aimpoint (8.65, 52.00)

3	8.693	50.315	4	5.65E-01	1.21E+02	7.91E-01	5.65E-01	1.21E+02	8.48E+02	8.49E+02	8
4	9.225	50.221	4	4.32E-01	8.32E+01	6.05E-01	4.32E-01	8.32E+01	5.83E+02	5.84E+02	8
5	9.374	50.524	4	1.74E-01	1.64E+01	2.44E-01	1.74E-01	1.64E+01	1.15E+02	1.15E+02	8
6	9.225	50.524	4	3.27E-01	6.58E+01	4.58E-01	3.27E-01	6.58E+01	4.61E+02	4.62E+02	8
7	9.097	50.534	4	5.23E-01	1.44E+02	7.32E-01	5.23E-01	1.44E+02	1.01E+03	1.01E+03	8
8	8.954	50.542	4	6.02E-01	1.97E+02	8.43E-01	6.02E-01	1.97E+02	1.38E+03	1.38E+03	8
9	8.617	50.560	4	4.41E-01	9.75E+01	6.17E-01	4.41E-01	9.75E+01	6.83E+02	6.84E+02	8
10	8.495	50.552	4	5.77E-01	1.26E+02	8.08E-01	5.77E-01	1.26E+02	8.83E+02	8.84E+02	8
11	8.373	50.534	4	6.27E-01	1.43E+02	8.78E-01	6.27E-01	1.43E+02	1.00E+03	1.00E+03	8
12	8.250	50.547	4	6.29E-01	1.31E+02	8.81E-01	6.29E-01	1.31E+02	9.18E+02	9.19E+02	8
15	9.347	45.818	3	1.89E-01	1.84E+01	2.65E-01	1.89E-01	1.84E+01	1.29E+02	1.29E+02	8
16	9.315	45.716	2	1.77E-01	1.83E+01	2.48E-01	1.77E-01	1.83E+01	1.28E+02	1.29E+02	8
17	8.700	49.576	2	6.56E-01	1.15E+02	9.18E-01	6.56E-01	1.15E+02	8.06E+02	8.07E+02	8
18	9.008	49.534	2	5.73E-01	1.09E+02	8.02E-01	5.73E-01	1.09E+02	7.64E+02	7.65E+02	8
19	6.838	49.795	1	5.42E-07	0.00E+00	7.59E-07	5.42E-07	0.00E+00	7.59E-07	1.52E-06	1
20	6.666	50.008	2	2.99E-08	0.00E+00	4.19E-08	2.99E-08	0.00E+00	4.19E-08	8.37E-08	1
23	7.914	48.242	2	2.61E-01	3.17E+01	3.65E-01	2.61E-01	3.17E+01	2.22E+02	2.23E+02	8
25	9.203	47.020	2	2.48E-01	3.13E+01	3.47E-01	2.48E-01	3.13E+01	2.19E+02	2.20E+02	8
27	9.010	46.883	2	3.17E-01	3.37E+01	4.44E-01	3.17E-01	3.37E+01	2.36E+02	2.37E+02	8
28	7.866	48.313	2	2.50E-01	2.94E+01	3.50E-01	2.50E-01	2.94E+01	2.06E+02	2.07E+02	8

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

29	9.155	46.980	2	2.74E-01	3.19E+01	3.84E-01	2.74E-01	3.19E+01	2.24E+02	2.24E+02	8
30	10.093	49.471	2	1.94E-02	1.22E+00	2.72E-02	1.94E-02	1.22E+00	8.57E+00	8.59E+00	4
31	7.404	49.288	1	7.18E-02	6.86E+00	1.01E-01	7.18E-02	6.86E+00	4.81E+01	4.82E+01	6
32	9.162	45.542	2	1.75E-01	1.91E+01	2.45E-01	1.75E-01	1.91E+01	1.34E+02	1.34E+02	8
33	9.134	45.693	1	1.96E-01	2.04E+01	2.74E-01	1.96E-01	2.04E+01	1.43E+02	1.43E+02	8
34	9.236	45.448	2	1.65E-01	1.78E+01	2.31E-01	1.65E-01	1.78E+01	1.25E+02	1.25E+02	8
36	9.184	45.669	1	1.76E-01	1.97E+01	2.46E-01	1.76E-01	1.97E+01	1.38E+02	1.38E+02	8
37	9.376	45.557	2	1.91E-01	1.65E+01	2.67E-01	1.91E-01	1.65E+01	1.16E+02	1.16E+02	8
40	10.792	42.386	5	2.57E-02	1.07E+00	3.60E-02	2.57E-02	1.07E+00	7.53E+00	7.56E+00	4
41	9.312	45.638	2	1.71E-01	1.79E+01	2.39E-01	1.71E-01	1.79E+01	1.26E+02	1.26E+02	8
43	10.740	42.320	1	3.33E-02	1.22E+00	4.66E-02	3.33E-02	1.22E+00	8.59E+00	8.63E+00	4
44	10.438	42.496	2	9.08E-02	2.26E+00	1.27E-01	9.08E-02	2.26E+00	1.59E+01	1.61E+01	5
48	10.165	46.551	1	7.82E-02	6.02E+00	1.09E-01	7.82E-02	6.02E+00	4.22E+01	4.24E+01	6
50	9.107	49.460	2	5.29E-01	9.34E+01	7.41E-01	5.29E-01	9.34E+01	6.55E+02	6.55E+02	8
51	9.325	48.044	2	3.45E-01	3.94E+01	4.83E-01	3.45E-01	3.94E+01	2.76E+02	2.77E+02	8
52	9.035	48.198	2	3.90E-01	5.73E+01	5.46E-01	3.90E-01	5.73E+01	4.02E+02	4.02E+02	8
54	9.191	48.044	2	3.58E-01	4.65E+01	5.01E-01	3.58E-01	4.65E+01	3.26E+02	3.27E+02	8
55	9.529	49.086	2	2.53E-01	3.14E+01	3.54E-01	2.53E-01	3.14E+01	2.20E+02	2.21E+02	8
56	9.628	49.104	2	1.89E-01	2.19E+01	2.65E-01	1.89E-01	2.19E+01	1.54E+02	1.54E+02	8
59	6.988	45.463	1	9.23E-02	3.65E+00	1.29E-01	9.23E-02	3.65E+00	2.57E+01	2.58E+01	5
60	6.741	45.290	1	6.23E-02	1.98E+00	8.72E-02	6.23E-02	1.98E+00	1.39E+01	1.40E+01	4
61	6.835	45.503	5	8.62E-02	2.50E+00	1.21E-01	8.62E-02	2.50E+00	1.76E+01	1.77E+01	5
62	6.947	45.334	6	9.65E-02	3.31E+00	1.35E-01	9.65E-02	3.31E+00	2.33E+01	2.34E+01	5
63	6.825	45.253	3	8.50E-02	2.44E+00	1.19E-01	8.50E-02	2.44E+00	1.72E+01	1.73E+01	5
65	6.947	45.513	3	8.99E-02	3.34E+00	1.26E-01	8.99E-02	3.34E+00	2.35E+01	2.36E+01	5
66	9.451	45.758	2	2.08E-01	1.65E+01	2.91E-01	2.08E-01	1.65E+01	1.16E+02	1.16E+02	8
67	6.814	45.579	3	8.03E-02	2.38E+00	1.12E-01	8.03E-02	2.38E+00	1.68E+01	1.69E+01	5
68	6.881	45.563	4	8.93E-02	2.82E+00	1.25E-01	8.93E-02	2.82E+00	1.99E+01	2.00E+01	5
70	9.286	45.768	3	1.75E-01	1.90E+01	2.45E-01	1.75E-01	1.90E+01	1.33E+02	1.33E+02	8
71	10.734	42.486	1	3.52E-02	1.26E+00	4.93E-02	3.52E-02	1.26E+00	8.87E+00	8.92E+00	4
72	10.680	42.398	1	4.31E-02	1.43E+00	6.03E-02	4.31E-02	1.43E+00	1.01E+01	1.01E+01	4
73	10.841	42.495	1	1.83E-02	9.22E-01	2.56E-02	1.83E-02	9.22E-01	6.48E+00	6.51E+00	4
84	7.296	50.661	9	3.20E-04	0.00E+00	4.48E-04	3.20E-04	0.00E+00	4.48E-04	8.96E-04	1
85	7.381	50.566	9	1.07E-03	6.39E-02	1.50E-03	1.07E-03	6.39E-02	4.49E-01	4.50E-01	2
86	7.458	50.491	4	5.12E-03	4.43E-01	7.17E-03	5.12E-03	4.43E-01	3.11E+00	3.12E+00	3
87	7.546	50.383	9	4.75E-02	2.50E+00	6.65E-02	4.75E-02	2.50E+00	1.76E+01	1.76E+01	5
89	7.474	50.111	3	3.34E-02	3.24E+00	4.68E-02	3.34E-02	3.24E+00	2.27E+01	2.28E+01	5
98	8.568	49.822	9	6.16E-01	1.13E+02	8.62E-01	6.16E-01	1.13E+02	7.92E+02	7.93E+02	8
99	8.667	49.854	9	6.35E-01	1.22E+02	8.89E-01	6.35E-01	1.22E+02	8.55E+02	8.56E+02	8
100	8.855	49.854	4	6.76E-01	1.37E+02	9.46E-01	6.76E-01	1.37E+02	9.60E+02	9.61E+02	8
101	8.983	49.851	9	6.22E-01	1.32E+02	8.71E-01	6.22E-01	1.32E+02	9.25E+02	9.26E+02	8
102	10.494	46.773	3	6.42E-02	2.14E+00	8.99E-02	6.42E-02	2.14E+00	1.51E+01	1.52E+01	5
103	9.999	46.817	1	7.02E-02	8.91E+00	9.83E-02	7.02E-02	8.91E+00	6.25E+01	6.26E+01	7
104	10.012	47.018	4	7.31E-02	8.67E+00	1.02E-01	7.31E-02	8.67E+00	6.08E+01	6.09E+01	7
105	10.124	47.005	4	7.20E-02	6.62E+00	1.01E-01	7.20E-02	6.62E+00	4.64E+01	4.65E+01	6
106	10.228	47.008	2	8.35E-02	4.93E+00	1.17E-01	8.35E-02	4.93E+00	3.46E+01	3.47E+01	6
107	10.338	46.997	4	7.83E-02	3.55E+00	1.10E-01	7.83E-02	3.55E+00	2.50E+01	2.51E+01	5
108	10.752	46.815	4	1.27E-02	8.58E-01	1.78E-02	1.27E-02	8.58E-01	6.02E+00	6.04E+00	4
109	10.818	46.635	4	6.18E-03	6.89E-01	8.65E-03	6.18E-03	6.89E-01	4.83E+00	4.84E+00	3
110	10.859	46.478	4	2.26E-03	5.92E-01	3.16E-03	2.26E-03	5.92E-01	4.15E+00	4.15E+00	3
111	10.656	46.929	2	2.13E-02	1.16E+00	2.98E-02	2.13E-02	1.16E+00	8.15E+00	8.18E+00	4
112	10.708	46.424	4	2.48E-02	1.18E+00	3.47E-02	2.48E-02	1.18E+00	8.29E+00	8.33E+00	4
113	10.612	46.387	4	4.46E-02	1.66E+00	6.24E-02	4.46E-02	1.66E+00	1.17E+01	1.17E+01	4
114	10.539	46.317	2	6.50E-02	2.16E+00	9.10E-02	6.50E-02	2.16E+00	1.52E+01	1.53E+01	5
115	10.400	46.322	4	9.13E-02	3.26E+00	1.28E-01	9.13E-02	3.26E+00	2.29E+01	2.31E+01	5
116	10.166	49.480	5	1.17E-02	6.80E-01	1.64E-02	1.17E-02	6.80E-01	4.78E+00	4.79E+00	3
117	10.234	49.391	3	8.86E-03	3.04E-01	1.24E-02	8.86E-03	3.04E-01	2.14E+00	2.15E+00	2
124	9.209	45.648	6	1.65E-01	1.93E+01	2.31E-01	1.65E-01	1.93E+01	1.35E+02	1.36E+02	8
125	9.207	45.539	4	1.63E-01	1.86E+01	2.28E-01	1.63E-01	1.86E+01	1.30E+02	1.31E+02	8
126	7.233	49.406	3	4.01E-02	2.59E+00	5.61E-02	4.01E-02	2.59E+00	1.82E+01	1.82E+01	5
127	8.809	48.886	3	6.05E-01	8.65E+01	8.47E-01	6.05E-01	8.65E+01	6.06E+02	6.07E+02	8
128	9.059	46.875	4	3.11E-01	3.29E+01	4.35E-01	3.11E-01	3.29E+01	2.31E+02	2.31E+02	8
129	7.927	48.331	4	2.71E-01	3.31E+01	3.79E-01	2.71E-01	3.31E+01	2.32E+02	2.32E+02	8
130	10.790	42.307	3	2.57E-02	1.05E+00	3.60E-02	2.57E-02	1.05E+00	7.39E+00	7.42E+00	4
131	10.723	42.397	2	3.65E-02	1.29E+00	5.11E-02	3.65E-02	1.29E+00	9.08E+00	9.13E+00	4
132	6.823	45.356	4	8.39E-02	2.43E+00	1.17E-01	8.39E-02	2.43E+00	1.71E+01	1.72E+01	5
133	6.760	45.453	5	6.67E-02	2.08E+00	9.34E-02	6.67E-02	2.08E+00	1.47E+01	1.47E+01	4
134	6.897	45.422	4	9.19E-02	2.95E+00	1.29E-01	9.19E-02	2.95E+00	2.08E+01	2.09E+01	5

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

135	10.895	42.320	2	1.44E-02	7.96E-01	2.02E-02	1.44E-02	7.96E-01	5.59E+00	5.61E+00	3
136	8.845	49.551	3	6.45E-01	1.19E+02	9.03E-01	6.45E-01	1.19E+02	8.34E+02	8.35E+02	8
137	8.931	49.541	3	6.08E-01	1.15E+02	8.51E-01	6.08E-01	1.15E+02	8.06E+02	8.07E+02	8
139	6.753	49.776	3	3.07E-07	0.00E+00	4.30E-07	3.07E-07	0.00E+00	4.30E-07	8.60E-07	1
140	11.090	42.435	2	5.57E-03	5.12E-01	7.80E-03	5.57E-03	5.12E-01	3.59E+00	3.60E+00	3
141	10.957	42.331	2	1.13E-02	7.09E-01	1.58E-02	1.13E-02	7.09E-01	4.98E+00	4.99E+00	3
142	10.598	42.284	2	5.60E-02	1.68E+00	7.84E-02	5.60E-02	1.68E+00	1.18E+01	1.19E+01	4
143	9.168	48.069	2	3.59E-01	4.81E+01	5.03E-01	3.59E-01	4.81E+01	3.37E+02	3.38E+02	8
144	9.281	48.111	3	3.50E-01	4.29E+01	4.90E-01	3.50E-01	4.29E+01	3.01E+02	3.01E+02	8
145	9.077	48.397	3	4.20E-01	6.04E+01	5.88E-01	4.20E-01	6.04E+01	4.23E+02	4.24E+02	8
146	9.170	48.242	3	3.68E-01	5.14E+01	5.15E-01	3.68E-01	5.14E+01	3.60E+02	3.61E+02	8
147	9.224	48.123	3	3.57E-01	4.63E+01	5.00E-01	3.57E-01	4.63E+01	3.25E+02	3.25E+02	8
149	9.103	48.033	3	3.58E-01	5.05E+01	5.01E-01	3.58E-01	5.05E+01	3.54E+02	3.55E+02	8
150	9.155	48.357	3	3.87E-01	5.47E+01	5.42E-01	3.87E-01	5.47E+01	3.83E+02	3.84E+02	8
151	10.364	46.506	2	9.00E-02	3.57E+00	1.26E-01	9.00E-02	3.57E+00	2.51E+01	2.52E+01	5
152	10.429	46.678	6	8.01E-02	2.75E+00	1.12E-01	8.01E-02	2.75E+00	1.94E+01	1.95E+01	5
153	10.617	46.667	4	3.65E-02	1.48E+00	5.11E-02	3.65E-02	1.48E+00	1.04E+01	1.05E+01	4
155	10.362	46.610	4	8.80E-02	3.55E+00	1.23E-01	8.80E-02	3.55E+00	2.50E+01	2.51E+01	5
156	6.782	49.962	4	2.76E-07	0.00E+00	3.86E-07	2.76E-07	0.00E+00	3.86E-07	7.73E-07	1
157	11.013	42.282	2	8.21E-03	6.21E-01	1.15E-02	8.21E-03	6.21E-01	4.36E+00	4.37E+00	3
158	10.148	49.313	4	2.65E-02	1.28E+00	3.71E-02	2.65E-02	1.28E+00	9.00E+00	9.03E+00	4
160	6.656	49.852	2	1.57E-08	0.00E+00	2.20E-08	1.57E-08	0.00E+00	2.20E-08	4.40E-08	1
161	9.225	46.968	2	2.39E-01	3.02E+01	3.35E-01	2.39E-01	3.02E+01	2.12E+02	2.12E+02	8
163	9.628	49.378	3	1.41E-01	1.95E+01	1.97E-01	1.41E-01	1.95E+01	1.37E+02	1.37E+02	8
164	10.250	46.682	3	9.74E-02	4.73E+00	1.36E-01	9.74E-02	4.73E+00	3.32E+01	3.34E+01	6
166	8.984	48.395	3	4.64E-01	6.42E+01	6.50E-01	4.64E-01	6.42E+01	4.50E+02	4.51E+02	8
167	9.347	45.802	3	1.89E-01	1.83E+01	2.65E-01	1.89E-01	1.83E+01	1.28E+02	1.29E+02	8
170	9.510	49.506	4	2.05E-01	3.06E+01	2.87E-01	2.05E-01	3.06E+01	2.14E+02	2.15E+02	8
171	9.409	49.498	4	2.98E-01	4.45E+01	4.17E-01	2.98E-01	4.45E+01	3.12E+02	3.12E+02	8
172	10.079	49.696	4	5.64E-03	6.02E-01	7.90E-03	5.64E-03	6.02E-01	4.22E+00	4.23E+00	3
173	9.889	49.626	4	7.34E-02	3.43E+00	1.03E-01	7.34E-02	3.43E+00	2.41E+01	2.42E+01	5
174	10.064	46.471	4	5.21E-02	7.45E+00	7.29E-02	5.21E-02	7.45E+00	5.22E+01	5.23E+01	7
175	9.819	46.598	4	1.23E-01	1.23E+01	1.72E-01	1.23E-01	1.23E+01	8.63E+01	8.64E+01	8
176	10.057	46.658	4	5.55E-02	7.65E+00	7.77E-02	5.55E-02	7.65E+00	5.36E+01	5.37E+01	7
177	9.973	46.643	4	7.36E-02	9.26E+00	1.03E-01	7.36E-02	9.26E+00	6.49E+01	6.50E+01	7
180	10.861	43.129	4	1.68E-02	9.10E-01	2.35E-02	1.68E-02	9.10E-01	6.39E+00	6.42E+00	4
181	11.213	43.174	4	1.29E-03	3.48E-01	1.81E-03	1.29E-03	3.48E-01	2.44E+00	2.44E+00	2
182	10.559	43.004	4	7.25E-02	1.97E+00	1.02E-01	7.25E-02	1.97E+00	1.39E+01	1.40E+01	4
190	9.092	48.131	8	3.67E-01	5.31E+01	5.14E-01	3.67E-01	5.31E+01	3.72E+02	3.73E+02	8
191	9.196	46.746	2	2.61E-01	2.84E+01	3.65E-01	2.61E-01	2.84E+01	1.99E+02	2.00E+02	8
192	9.123	46.758	2	2.83E-01	3.01E+01	3.96E-01	2.83E-01	3.01E+01	2.11E+02	2.11E+02	8
193	7.974	48.204	2	2.75E-01	3.46E+01	3.85E-01	2.75E-01	3.46E+01	2.43E+02	2.43E+02	8
194	7.911	48.293	2	2.63E-01	3.19E+01	3.68E-01	2.63E-01	3.19E+01	2.24E+02	2.24E+02	8
195	10.224	46.931	2	8.62E-02	5.03E+00	1.21E-01	8.62E-02	5.03E+00	3.53E+01	3.55E+01	6
196	10.654	46.844	2	2.35E-02	1.19E+00	3.29E-02	2.35E-02	1.19E+00	8.36E+00	8.40E+00	4
197	10.503	46.322	2	7.44E-02	2.39E+00	1.04E-01	7.44E-02	2.39E+00	1.68E+01	1.69E+01	5
198	9.994	46.745	2	6.99E-02	8.95E+00	9.79E-02	6.99E-02	8.95E+00	6.27E+01	6.28E+01	7
199	10.245	46.833	2	9.40E-02	4.74E+00	1.32E-01	9.40E-02	4.74E+00	3.33E+01	3.34E+01	6
200	9.182	45.726	2	1.84E-01	2.01E+01	2.58E-01	1.84E-01	2.01E+01	1.41E+02	1.41E+02	8
201	9.312	45.828	2	1.85E-01	1.90E+01	2.59E-01	1.85E-01	1.90E+01	1.33E+02	1.34E+02	8
202	9.294	45.449	2	1.72E-01	1.71E+01	2.41E-01	1.72E-01	1.71E+01	1.20E+02	1.20E+02	8
203	9.405	45.436	2	1.95E-01	1.55E+01	2.73E-01	1.95E-01	1.55E+01	1.09E+02	1.09E+02	8
204	9.256	48.008	2	3.59E-01	4.28E+01	5.03E-01	3.59E-01	4.28E+01	3.00E+02	3.01E+02	8
205	6.956	45.454	2	9.22E-02	3.40E+00	1.29E-01	9.22E-02	3.40E+00	2.39E+01	2.41E+01	5
206	10.774	42.454	2	2.88E-02	1.13E+00	4.03E-02	2.88E-02	1.13E+00	7.95E+00	7.99E+00	4
207	10.948	42.402	2	1.20E-02	7.39E-01	1.68E-02	1.20E-02	7.39E-01	5.19E+00	5.21E+00	3
208	11.091	42.478	2	5.54E-03	5.00E-01	7.76E-03	5.54E-03	5.00E-01	3.51E+00	3.52E+00	3
209	10.869	42.349	2	1.58E-02	8.45E-01	2.21E-02	1.58E-02	8.45E-01	5.94E+00	5.96E+00	3
210	7.880	48.198	2	2.49E-01	2.95E+01	3.49E-01	2.49E-01	2.95E+01	2.07E+02	2.07E+02	8
211	10.748	42.548	2	3.33E-02	1.22E+00	4.66E-02	3.33E-02	1.22E+00	8.59E+00	8.63E+00	4
212	6.932	45.285	4	9.72E-02	3.19E+00	1.36E-01	9.72E-02	3.19E+00	2.25E+01	2.26E+01	5
213	9.046	48.117	3	3.72E-01	5.51E+01	5.21E-01	3.72E-01	5.51E+01	3.86E+02	3.87E+02	8
214	9.112	48.189	3	3.70E-01	5.34E+01	5.18E-01	3.70E-01	5.34E+01	3.74E+02	3.75E+02	8
216	9.062	46.820	4	3.04E-01	3.21E+01	4.26E-01	3.04E-01	3.21E+01	2.25E+02	2.26E+02	8
217	9.083	47.027	4	3.12E-01	3.43E+01	4.37E-01	3.12E-01	3.43E+01	2.41E+02	2.41E+02	8
218	9.051	47.019	4	3.29E-01	3.49E+01	4.61E-01	3.29E-01	3.49E+01	2.45E+02	2.45E+02	8
219	9.013	47.028	4	3.33E-01	3.56E+01	4.66E-01	3.33E-01	3.56E+01	2.50E+02	2.50E+02	8
220	8.964	47.019	4	3.37E-01	3.62E+01	4.72E-01	3.37E-01	3.62E+01	2.54E+02	2.54E+02	8

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

221	7.866	48.425	4	2.56E-01	3.01E+01	3.58E-01	2.56E-01	3.01E+01	2.11E+02	2.11E+02	8
222	7.904	48.425	4	2.70E-01	3.24E+01	3.78E-01	2.70E-01	3.24E+01	2.27E+02	2.28E+02	8
223	7.951	48.433	4	2.88E-01	3.54E+01	4.03E-01	2.88E-01	3.54E+01	2.48E+02	2.49E+02	8
224	7.819	48.424	4	2.44E-01	2.75E+01	3.42E-01	2.44E-01	2.75E+01	1.93E+02	1.93E+02	8
225	7.929	48.300	4	2.70E-01	3.30E+01	3.78E-01	2.70E-01	3.30E+01	2.31E+02	2.32E+02	8
226	10.758	42.201	4	2.98E-02	1.14E+00	4.17E-02	2.98E-02	1.14E+00	8.02E+00	8.06E+00	4
227	10.836	42.132	4	1.84E-02	8.62E-01	2.58E-02	1.84E-02	8.62E-01	6.06E+00	6.09E+00	4
228	10.859	42.183	4	1.60E-02	8.00E-01	2.24E-02	1.60E-02	8.00E-01	5.62E+00	5.64E+00	3
229	10.939	42.475	4	1.25E-02	7.42E-01	1.75E-02	1.25E-02	7.42E-01	5.21E+00	5.23E+00	3
230	6.761	45.361	5	6.73E-02	2.09E+00	9.42E-02	6.73E-02	2.09E+00	1.47E+01	1.48E+01	4
231	6.880	45.213	5	9.47E-02	2.80E+00	1.33E-01	9.47E-02	2.80E+00	1.97E+01	1.99E+01	5
232	9.283	48.051	5	3.52E-01	4.19E+01	4.93E-01	3.52E-01	4.19E+01	2.94E+02	2.94E+02	8
233	9.076	48.344	5	4.09E-01	5.91E+01	5.73E-01	4.09E-01	5.91E+01	4.14E+02	4.15E+02	8
234	9.171	48.201	5	3.63E-01	5.04E+01	5.08E-01	3.63E-01	5.04E+01	3.53E+02	3.54E+02	8
235	10.014	46.937	5	7.02E-02	8.61E+00	9.83E-02	7.02E-02	8.61E+00	6.04E+01	6.05E+01	7
236	9.223	48.060	5	3.58E-01	4.53E+01	5.01E-01	3.58E-01	4.53E+01	3.18E+02	3.18E+02	8
237	9.156	48.309	5	3.80E-01	5.36E+01	5.32E-01	3.80E-01	5.36E+01	3.76E+02	3.76E+02	8
238	8.987	48.346	5	4.53E-01	6.28E+01	6.34E-01	4.53E-01	6.28E+01	4.40E+02	4.41E+02	8
239	10.579	46.422	5	5.25E-02	1.85E+00	7.35E-02	5.25E-02	1.85E+00	1.30E+01	1.31E+01	4
240	10.491	42.450	5	7.83E-02	2.06E+00	1.10E-01	7.83E-02	2.06E+00	1.45E+01	1.46E+01	4
241	10.706	46.484	5	2.41E-02	1.16E+00	3.37E-02	2.41E-02	1.16E+00	8.15E+00	8.19E+00	4
242	10.798	46.470	5	1.03E-02	8.17E-01	1.44E-02	1.03E-02	8.17E-01	5.73E+00	5.75E+00	3
243	10.126	46.910	5	7.24E-02	6.61E+00	1.01E-01	7.24E-02	6.61E+00	4.64E+01	4.65E+01	6
244	10.336	46.922	5	8.17E-02	3.62E+00	1.14E-01	8.17E-02	3.62E+00	2.55E+01	2.56E+01	5
245	10.750	46.730	5	1.41E-02	8.96E-01	1.97E-02	1.41E-02	8.96E-01	6.29E+00	6.31E+00	4
246	10.818	46.559	5	6.68E-03	7.13E-01	9.35E-03	6.68E-03	7.13E-01	5.00E+00	5.01E+00	3
247	10.846	42.387	5	1.74E-02	9.02E-01	2.44E-02	1.74E-02	9.02E-01	6.34E+00	6.36E+00	4
248	10.955	42.100	5	1.05E-02	6.81E-01	1.47E-02	1.05E-02	6.81E-01	4.78E+00	4.80E+00	3
249	10.362	46.339	5	9.33E-02	3.65E+00	1.31E-01	9.33E-02	3.65E+00	2.57E+01	2.58E+01	5
250	9.367	45.631	5	1.89E-01	1.70E+01	2.65E-01	1.89E-01	1.70E+01	1.19E+02	1.20E+02	8
251	9.378	45.682	5	1.93E-01	1.72E+01	2.70E-01	1.93E-01	1.72E+01	1.21E+02	1.21E+02	8
252	9.381	45.733	5	1.94E-01	1.74E+01	2.72E-01	1.94E-01	1.74E+01	1.22E+02	1.22E+02	8
253	8.778	49.558	4	6.50E-01	1.17E+02	9.10E-01	6.50E-01	1.17E+02	8.20E+02	8.21E+02	8
255	9.070	49.530	7	5.47E-01	1.02E+02	7.66E-01	5.47E-01	1.02E+02	7.15E+02	7.16E+02	8
256	7.785	48.318	2	2.33E-01	2.53E+01	3.26E-01	2.33E-01	2.53E+01	1.77E+02	1.78E+02	8
258	7.892	48.149	2	2.50E-01	2.98E+01	3.50E-01	2.50E-01	2.98E+01	2.09E+02	2.09E+02	8
259	7.839	48.229	3	2.40E-01	2.75E+01	3.36E-01	2.40E-01	2.75E+01	1.93E+02	1.93E+02	8
261	9.121	46.815	2	2.84E-01	3.08E+01	3.98E-01	2.84E-01	3.08E+01	2.16E+02	2.16E+02	8
264	10.880	42.213	6	1.49E-02	7.78E-01	2.09E-02	1.49E-02	7.78E-01	5.47E+00	5.49E+00	3
265	11.038	42.174	3	6.33E-03	5.78E-01	8.86E-03	6.33E-03	5.78E-01	4.05E+00	4.06E+00	3
269	10.759	42.060	2	2.88E-02	1.11E+00	4.03E-02	2.88E-02	1.11E+00	7.81E+00	7.85E+00	4
270	11.077	42.122	2	4.66E-03	5.26E-01	6.52E-03	4.66E-03	5.26E-01	3.69E+00	3.70E+00	3
273	10.992	42.130	4	8.62E-03	6.34E-01	1.21E-02	8.62E-03	6.34E-01	4.45E+00	4.46E+00	3
274	10.943	42.205	4	1.16E-02	6.97E-01	1.62E-02	1.16E-02	6.97E-01	4.90E+00	4.91E+00	3
275	10.922	42.146	4	1.25E-02	7.23E-01	1.75E-02	1.25E-02	7.23E-01	5.08E+00	5.10E+00	3
276	11.113	42.169	4	3.87E-03	4.82E-01	5.42E-03	3.87E-03	4.82E-01	3.38E+00	3.38E+00	3
277	10.886	42.648	1	1.52E-02	8.29E-01	2.13E-02	1.52E-02	8.29E-01	5.82E+00	5.85E+00	3
278	10.882	42.109	1	1.46E-02	7.76E-01	2.04E-02	1.46E-02	7.76E-01	5.45E+00	5.47E+00	3
279	11.151	42.140	1	2.72E-03	4.33E-01	3.81E-03	2.72E-03	4.33E-01	3.03E+00	3.04E+00	3
280	11.031	42.559	2	7.91E-03	5.62E-01	1.11E-02	7.91E-03	5.62E-01	3.95E+00	3.96E+00	3
281	10.438	42.395	2	8.88E-02	2.22E+00	1.24E-01	8.88E-02	2.22E+00	1.57E+01	1.58E+01	5
282	10.719	42.175	2	3.52E-02	1.27E+00	4.93E-02	3.52E-02	1.27E+00	8.94E+00	8.99E+00	4
284	10.749	42.595	2	3.34E-02	1.22E+00	4.68E-02	3.34E-02	1.22E+00	8.59E+00	8.63E+00	4
285	9.931	47.046	2	9.30E-02	1.05E+01	1.30E-01	9.30E-02	1.05E+01	7.36E+01	7.38E+01	7
286	9.424	45.654	2	2.08E-01	1.63E+01	2.91E-01	2.08E-01	1.63E+01	1.14E+02	1.15E+02	8
287	7.629	50.205	2	8.84E-02	7.19E+00	1.24E-01	8.84E-02	7.19E+00	5.05E+01	5.06E+01	7
291	8.926	50.343	2	6.83E-01	1.73E+02	9.56E-01	6.83E-01	1.73E+02	1.21E+03	1.21E+03	8
293	7.936	48.474	5	2.86E-01	3.48E+01	4.00E-01	2.86E-01	3.48E+01	2.44E+02	2.44E+02	8
294	7.870	48.475	5	2.62E-01	3.07E+01	3.67E-01	2.62E-01	3.07E+01	2.15E+02	2.16E+02	8
295	7.829	48.482	5	2.51E-01	2.83E+01	3.51E-01	2.51E-01	2.83E+01	1.98E+02	1.99E+02	8
296	7.905	48.473	5	2.74E-01	3.28E+01	3.84E-01	2.74E-01	3.28E+01	2.30E+02	2.30E+02	8
297	9.070	47.086	5	3.20E-01	3.54E+01	4.48E-01	3.20E-01	3.54E+01	2.48E+02	2.49E+02	8
298	9.042	47.071	5	3.32E-01	3.58E+01	4.65E-01	3.32E-01	3.58E+01	2.51E+02	2.52E+02	8
299	8.995	47.083	5	3.38E-01	3.67E+01	4.73E-01	3.38E-01	3.67E+01	2.57E+02	2.58E+02	8
300	8.958	47.076	5	3.42E-01	3.71E+01	4.79E-01	3.42E-01	3.71E+01	2.60E+02	2.61E+02	8
301	7.333	49.509	4	5.69E-02	4.17E+00	7.97E-02	5.69E-02	4.17E+00	2.93E+01	2.93E+01	5
302	7.223	49.531	4	3.39E-02	2.06E+00	4.75E-02	3.39E-02	2.06E+00	1.45E+01	1.45E+01	4
303	7.102	49.534	4	1.28E-02	9.94E-01	1.79E-02	1.28E-02	9.94E-01	6.98E+00	6.99E+00	4

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

304	8.733	49.028	4	6.21E-01	9.18E+01	8.69E-01	6.21E-01	9.18E+01	6.43E+02	6.44E+02	8
305	8.648	49.028	4	6.27E-01	9.10E+01	8.78E-01	6.27E-01	9.10E+01	6.38E+02	6.39E+02	8
306	8.827	49.020	4	6.12E-01	9.23E+01	8.57E-01	6.12E-01	9.23E+01	6.47E+02	6.48E+02	8
307	8.583	50.301	4	5.60E-01	1.16E+02	7.84E-01	5.60E-01	1.16E+02	8.13E+02	8.14E+02	8
309	10.450	46.852	4	7.26E-02	2.33E+00	1.02E-01	7.26E-02	2.33E+00	1.64E+01	1.65E+01	5
321	11.110	42.321	1	4.56E-03	4.90E-01	6.38E-03	4.56E-03	4.90E-01	3.44E+00	3.44E+00	3
322	10.514	42.291	4	7.15E-02	1.94E+00	1.00E-01	7.15E-02	1.94E+00	1.37E+01	1.38E+01	4
323	10.517	42.409	3	7.28E-02	1.96E+00	1.02E-01	7.28E-02	1.96E+00	1.38E+01	1.39E+01	4
324	10.448	42.294	3	8.39E-02	2.14E+00	1.17E-01	8.39E-02	2.14E+00	1.51E+01	1.52E+01	5
325	10.492	42.500	9	7.89E-02	2.07E+00	1.10E-01	7.89E-02	2.07E+00	1.46E+01	1.47E+01	4

Case 2: Protected				2 rounds at aimpoint (10.75, 43.10)							
44	10.438	42.496	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E+00	2.00E+01	2.00E+01	5
135	10.895	42.320	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E+00	9.73E+00	9.73E+00	4
140	11.090	42.435	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E+01	2.86E+02	2.86E+02	8
141	10.957	42.331	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+01	7.21E+01	7.21E+01	7
157	11.013	42.282	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E+01	5.15E+02	5.15E+02	8
207	10.948	42.402	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-01	1.37E+00	1.37E+00	2
208	11.091	42.478	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E+01	1.19E+02	1.19E+02	8
209	10.869	42.349	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-01	2.72E+00	2.72E+00	2
228	10.859	42.183	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.27E-01	3.69E+00	3.69E+00	3
229	10.939	42.475	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.55E-02	3.19E-01	3.19E-01	2
240	10.491	42.450	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E+00	7.63E+00	7.63E+00	4
248	10.955	42.100	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E+00	2.21E+01	2.21E+01	5
264	10.880	42.213	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E+00	1.31E+01	1.31E+01	4
265	11.038	42.174	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E+01	4.60E+02	4.60E+02	8
270	11.077	42.122	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E+01	2.25E+02	2.25E+02	8
273	10.992	42.130	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E+01	1.41E+02	1.41E+02	8
274	10.943	42.205	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E+00	4.21E+01	4.21E+01	6
275	10.922	42.146	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E+00	2.13E+01	2.13E+01	5
276	11.113	42.169	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E+01	3.26E+02	3.26E+02	8
278	10.882	42.109	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.24E-01	5.77E+00	5.77E+00	3
279	11.151	42.140	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E+01	1.64E+02	1.64E+02	8
280	11.031	42.559	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E+00	1.91E+01	1.91E+01	5
321	11.110	42.321	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E+01	4.59E+02	4.59E+02	8
323	10.517	42.409	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-01	9.10E-01	9.10E-01	2
325	10.492	42.500	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E+00	1.51E+01	1.51E+01	5

VX 500kg TBM
Heavy Attack
Height of Release: 800m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				4 rounds at aimpoint (9.65, 51.40)							
4	9.225	50.221	4	2.79E-02	0.00E+00	3.91E-02	2.79E-02	0.00E+00	3.91E-02	7.81E-02	1
5	9.374	50.524	4	4.72E-03	3.61E+01	6.61E-03	4.72E-03	3.61E+01	2.53E+02	2.53E+02	8
6	9.225	50.524	4	5.59E-03	0.00E+00	7.83E-03	5.59E-03	0.00E+00	7.83E-03	1.57E-02	1
7	9.097	50.534	4	1.30E-03	0.00E+00	1.82E-03	1.30E-03	0.00E+00	1.82E-03	3.64E-03	1
8	8.954	50.542	4	1.05E-06	0.00E+00	1.47E-06	1.05E-06	0.00E+00	1.47E-06	2.94E-06	1
15	9.347	45.818	3	1.76E+00	8.12E+01	2.46E+00	1.76E+00	8.12E+01	5.71E+02	5.73E+02	8
16	9.315	45.716	2	1.71E+00	7.29E+01	2.39E+00	1.71E+00	7.29E+01	5.13E+02	5.15E+02	8
18	9.008	49.534	2	6.20E-05	0.00E+00	8.68E-05	6.20E-05	0.00E+00	8.68E-05	1.74E-04	1
25	9.203	47.020	2	1.27E+00	4.99E+01	1.78E+00	1.27E+00	4.99E+01	3.51E+02	3.53E+02	8
27	9.010	46.883	2	1.11E-01	2.71E+00	1.55E-01	1.11E-01	2.71E+00	1.91E+01	1.93E+01	5
29	9.155	46.980	2	9.13E-01	2.93E+01	1.28E+00	9.13E-01	2.93E+01	2.06E+02	2.08E+02	8
30	10.093	49.471	2	2.29E-01	1.99E+00	3.21E-01	2.29E-01	1.99E+00	1.43E+01	1.46E+01	4
32	9.162	45.542	2	1.06E+00	3.58E+01	1.48E+00	1.06E+00	3.58E+01	2.52E+02	2.54E+02	8
33	9.134	45.693	1	8.87E-01	2.93E+01	1.24E+00	8.87E-01	2.93E+01	2.06E+02	2.08E+02	8
34	9.236	45.448	2	1.50E+00	5.59E+01	2.10E+00	1.50E+00	5.59E+01	3.93E+02	3.96E+02	8
36	9.184	45.669	1	1.19E+00	4.21E+01	1.67E+00	1.19E+00	4.21E+01	2.96E+02	2.98E+02	8
37	9.376	45.557	2	1.81E+00	7.44E+01	2.53E+00	1.81E+00	7.44E+01	5.23E+02	5.26E+02	8
40	10.792	42.386	5	1.73E-03	0.00E+00	2.42E-03	1.73E-03	0.00E+00	2.42E-03	4.84E-03	1
41	9.312	45.638	2	1.70E+00	7.00E+01	2.38E+00	1.70E+00	7.00E+01	4.92E+02	4.95E+02	8
43	10.740	42.320	1	4.29E-03	0.00E+00	6.01E-03	4.29E-03	0.00E+00	6.01E-03	1.20E-02	1
44	10.438	42.496	2	2.74E-01	6.18E+00	3.84E-01	2.74E-01	6.18E+00	4.36E+01	4.40E+01	6

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

48	10.165	46.551	1	1.48E+00	4.62E+01	2.07E+00	1.48E+00	4.62E+01	3.25E+02	3.28E+02	8
50	9.107	49.460	2	7.49E-02	0.00E+00	1.05E-01	7.49E-02	0.00E+00	1.05E-01	2.10E-01	1
51	9.325	48.044	2	1.34E+00	1.24E+02	1.88E+00	1.34E+00	1.24E+02	8.70E+02	8.72E+02	8
52	9.035	48.198	2	5.27E-04	2.69E-03	7.38E-04	5.27E-04	2.69E-03	1.96E-02	2.03E-02	1
54	9.191	48.044	2	9.10E-01	2.92E+01	1.27E+00	9.10E-01	2.92E+01	2.06E+02	2.07E+02	8
55	9.529	49.086	2	4.29E-01	3.67E+00	6.01E-01	4.29E-01	3.67E+00	2.63E+01	2.69E+01	5
56	9.628	49.104	2	1.49E-01	1.40E+00	2.09E-01	1.49E-01	1.40E+00	1.00E+01	1.02E+01	4
66	9.451	45.758	2	1.94E+00	7.56E+01	2.72E+00	1.94E+00	7.56E+01	5.32E+02	5.35E+02	8
70	9.286	45.768	3	1.67E+00	6.93E+01	2.34E+00	1.67E+00	6.93E+01	4.87E+02	4.90E+02	8
71	10.734	42.486	1	1.87E-03	0.00E+00	2.62E-03	1.87E-03	0.00E+00	2.62E-03	5.24E-03	1
72	10.680	42.398	1	4.80E-03	0.00E+00	6.72E-03	4.80E-03	0.00E+00	6.72E-03	1.34E-02	1
73	10.841	42.495	1	1.35E-04	0.00E+00	1.89E-04	1.35E-04	0.00E+00	1.89E-04	3.78E-04	1
90	10.433	50.482	9	1.29E-07	0.00E+00	1.81E-07	1.29E-07	0.00E+00	1.81E-07	3.61E-07	1
100	8.855	49.854	4	6.50E-07	0.00E+00	9.10E-07	6.50E-07	0.00E+00	9.10E-07	1.82E-06	1
101	8.983	49.851	9	1.74E-05	0.00E+00	2.44E-05	1.74E-05	0.00E+00	2.44E-05	4.87E-05	1
102	10.494	46.773	3	6.62E-05	0.00E+00	9.27E-05	6.62E-05	0.00E+00	9.27E-05	1.85E-04	1
103	9.999	46.817	1	3.51E+00	1.94E+02	4.91E+00	3.51E+00	1.94E+02	1.36E+03	1.37E+03	8
104	10.012	47.018	4	3.25E+00	1.83E+02	4.55E+00	3.25E+00	1.83E+02	1.29E+03	1.29E+03	8
105	10.124	47.005	4	1.86E+00	6.67E+01	2.60E+00	1.86E+00	6.67E+01	4.70E+02	4.72E+02	8
106	10.228	47.008	2	4.83E-01	1.25E+01	6.76E-01	4.83E-01	1.25E+01	8.82E+01	8.89E+01	8
107	10.338	46.997	4	1.09E-01	5.45E-01	1.53E-01	1.09E-01	5.45E-01	3.97E+00	4.12E+00	3
113	10.612	46.387	4	2.38E-05	0.00E+00	3.33E-05	2.38E-05	0.00E+00	3.33E-05	6.66E-05	1
114	10.539	46.317	2	7.45E-05	0.00E+00	1.04E-04	7.45E-05	0.00E+00	1.04E-04	2.09E-04	1
115	10.400	46.322	4	9.37E-02	1.89E-01	1.31E-01	9.37E-02	1.89E-01	1.45E+00	1.59E+00	2
116	10.166	49.480	5	1.20E-01	0.00E+00	1.68E-01	1.20E-01	0.00E+00	1.68E-01	3.36E-01	2
117	10.234	49.391	3	2.86E-02	0.00E+00	4.00E-02	2.86E-02	0.00E+00	4.00E-02	8.01E-02	1
124	9.209	45.648	6	1.35E+00	4.88E+01	1.89E+00	1.35E+00	4.88E+01	3.43E+02	3.45E+02	8
125	9.207	45.539	4	1.33E+00	4.78E+01	1.86E+00	1.33E+00	4.78E+01	3.36E+02	3.38E+02	8
128	9.059	46.875	4	2.08E-01	7.23E+00	2.91E-01	2.08E-01	7.23E+00	5.09E+01	5.12E+01	7
130	10.790	42.307	3	2.45E-03	0.00E+00	3.43E-03	2.45E-03	0.00E+00	3.43E-03	6.86E-03	1
131	10.723	42.397	2	3.60E-03	0.00E+00	5.04E-03	3.60E-03	0.00E+00	5.04E-03	1.01E-02	1
135	10.895	42.320	2	2.06E-06	0.00E+00	2.88E-06	2.06E-06	0.00E+00	2.88E-06	5.77E-06	1
137	8.931	49.541	3	3.12E-05	0.00E+00	4.37E-05	3.12E-05	0.00E+00	4.37E-05	8.74E-05	1
141	10.957	42.331	2	1.19E-06	0.00E+00	1.67E-06	1.19E-06	0.00E+00	1.67E-06	3.33E-06	1
142	10.598	42.284	2	6.26E-02	6.69E-01	8.76E-02	6.26E-02	6.69E-01	4.77E+00	4.86E+00	3
143	9.168	48.069	2	7.56E-01	1.89E+01	1.06E+00	7.56E-01	1.89E+01	1.33E+02	1.34E+02	8
144	9.281	48.111	3	1.28E+00	9.68E+01	1.79E+00	1.28E+00	9.68E+01	6.79E+02	6.81E+02	8
145	9.077	48.397	3	1.41E-01	4.41E-01	1.97E-01	1.41E-01	4.41E-01	3.28E+00	3.48E+00	3
146	9.170	48.242	3	7.05E-01	1.61E+01	9.87E-01	7.05E-01	1.61E+01	1.14E+02	1.15E+02	8
147	9.224	48.123	3	1.09E+00	4.93E+01	1.53E+00	1.09E+00	4.93E+01	3.47E+02	3.48E+02	8
149	9.103	48.033	3	3.51E-01	3.57E+00	4.91E-01	3.51E-01	3.57E+00	2.55E+01	2.60E+01	5
150	9.155	48.357	3	5.65E-01	8.33E+00	7.91E-01	5.65E-01	8.33E+00	5.91E+01	5.99E+01	7
151	10.364	46.506	2	1.36E-01	9.32E-01	1.90E-01	1.36E-01	9.32E-01	6.71E+00	6.90E+00	4
152	10.429	46.678	6	2.82E-02	0.00E+00	3.95E-02	2.82E-02	0.00E+00	3.95E-02	7.90E-02	1
153	10.617	46.667	4	1.54E-05	0.00E+00	2.16E-05	1.54E-05	0.00E+00	2.16E-05	4.31E-05	1
155	10.362	46.610	4	1.25E-01	7.88E-01	1.75E-01	1.25E-01	7.88E-01	5.69E+00	5.87E+00	3
157	11.013	42.282	2	5.58E-07	0.00E+00	7.81E-07	5.58E-07	0.00E+00	7.81E-07	1.56E-06	1
158	10.148	49.313	4	2.13E-01	4.18E-02	2.98E-01	2.13E-01	4.18E-02	5.91E-01	8.89E-01	2
161	9.225	46.968	2	1.44E+00	6.14E+01	2.02E+00	1.44E+00	6.14E+01	4.32E+02	4.34E+02	8
163	9.628	49.378	3	9.20E-02	4.26E-02	1.29E-01	9.20E-02	4.26E-02	4.27E-01	5.56E-01	2
164	10.250	46.682	3	2.67E-01	1.04E+01	3.74E-01	2.67E-01	1.04E+01	7.32E+01	7.35E+01	7
166	8.984	48.395	3	2.46E-04	0.00E+00	3.44E-04	2.46E-04	0.00E+00	3.44E-04	6.89E-04	1
167	9.347	45.802	3	1.77E+00	8.12E+01	2.48E+00	1.77E+00	8.12E+01	5.71E+02	5.73E+02	8
170	9.510	49.506	4	2.15E-01	6.73E-01	3.01E-01	2.15E-01	6.73E-01	5.01E+00	5.31E+00	3
171	9.409	49.498	4	2.86E-01	8.05E+01	4.00E-01	2.86E-01	8.05E+01	5.64E+02	5.64E+02	8
172	10.079	49.696	4	9.61E-02	1.55E+00	1.35E-01	9.61E-02	1.55E+00	1.10E+01	1.11E+01	4
173	9.889	49.626	4	4.27E-01	9.91E+01	5.98E-01	4.27E-01	9.91E+01	6.94E+02	6.95E+02	8
174	10.064	46.471	4	2.92E+00	1.29E+02	4.09E+00	2.92E+00	1.29E+02	9.07E+02	9.11E+02	8
175	9.819	46.598	4	4.80E+00	2.32E+02	6.72E+00	4.80E+00	2.32E+02	1.63E+03	1.64E+03	8
176	10.057	46.658	4	2.95E+00	1.35E+02	4.13E+00	2.95E+00	1.35E+02	9.49E+02	9.53E+02	8
177	9.973	46.643	4	3.89E+00	2.10E+02	5.45E+00	3.89E+00	2.10E+02	1.48E+03	1.48E+03	8
182	10.559	43.004	4	7.97E-02	7.23E-01	1.12E-01	7.97E-02	7.23E-01	5.17E+00	5.28E+00	3
190	9.092	48.131	8	2.65E-01	2.00E+00	3.71E-01	2.65E-01	2.00E+00	1.44E+01	1.47E+01	4
191	9.196	46.746	2	1.24E+00	4.80E+01	1.74E+00	1.24E+00	4.80E+01	3.38E+02	3.39E+02	8
192	9.123	46.758	2	7.00E-01	2.15E+01	9.80E-01	7.00E-01	2.15E+01	1.51E+02	1.52E+02	8
195	10.224	46.931	2	5.57E-01	1.47E+01	7.80E-01	5.57E-01	1.47E+01	1.04E+02	1.04E+02	8
197	10.503	46.322	2	9.82E-05	0.00E+00	1.37E-04	9.82E-05	0.00E+00	1.37E-04	2.75E-04	1
198	9.994	46.745	2	3.60E+00	1.97E+02	5.04E+00	3.60E+00	1.97E+02	1.38E+03	1.39E+03	8

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

199	10.245	46.833	2	3.00E-01	1.01E+01	4.20E-01	3.00E-01	1.01E+01	7.11E+01	7.15E+01	7
200	9.182	45.726	2	1.18E+00	4.23E+01	1.65E+00	1.18E+00	4.23E+01	2.98E+02	2.99E+02	8
201	9.312	45.828	2	1.71E+00	7.48E+01	2.39E+00	1.71E+00	7.48E+01	5.26E+02	5.28E+02	8
202	9.294	45.449	2	1.66E+00	6.63E+01	2.32E+00	1.66E+00	6.63E+01	4.66E+02	4.69E+02	8
203	9.405	45.436	2	1.86E+00	7.40E+01	2.60E+00	1.86E+00	7.40E+01	5.21E+02	5.23E+02	8
204	9.256	48.008	2	1.31E+00	7.63E+01	1.83E+00	1.31E+00	7.63E+01	5.36E+02	5.38E+02	8
206	10.774	42.454	2	1.56E-03	0.00E+00	2.18E-03	1.56E-03	0.00E+00	2.18E-03	4.37E-03	1
207	10.948	42.402	2	9.58E-07	0.00E+00	1.34E-06	9.58E-07	0.00E+00	1.34E-06	2.68E-06	1
209	10.869	42.349	2	2.16E-06	0.00E+00	3.02E-06	2.16E-06	0.00E+00	3.02E-06	6.05E-06	1
211	10.748	42.548	2	7.73E-04	0.00E+00	1.08E-03	7.73E-04	0.00E+00	1.08E-03	2.16E-03	1
213	9.046	48.117	3	6.17E-03	1.47E-01	8.64E-03	6.17E-03	1.47E-01	1.04E+00	1.05E+00	2
214	9.112	48.189	3	3.78E-01	3.69E+00	5.29E-01	3.78E-01	3.69E+00	2.64E+01	2.69E+01	5
216	9.062	46.820	4	2.38E-01	8.08E+00	3.33E-01	2.38E-01	8.08E+00	5.69E+01	5.72E+01	7
217	9.083	47.027	4	3.65E-01	9.87E+00	5.11E-01	3.65E-01	9.87E+00	6.96E+01	7.01E+01	7
218	9.051	47.019	4	1.25E-01	5.08E+00	1.75E-01	1.25E-01	5.08E+00	3.57E+01	3.59E+01	6
219	9.013	47.028	4	9.46E-02	2.39E+00	1.32E-01	9.46E-02	2.39E+00	1.69E+01	1.70E+01	5
220	8.964	47.019	4	6.70E-02	4.33E-01	9.38E-02	6.70E-02	4.33E-01	3.12E+00	3.22E+00	3
226	10.758	42.201	4	5.09E-03	0.00E+00	7.13E-03	5.09E-03	0.00E+00	7.13E-03	1.43E-02	1
227	10.836	42.132	4	9.12E-04	0.00E+00	1.28E-03	9.12E-04	0.00E+00	1.28E-03	2.55E-03	1
228	10.859	42.183	4	3.78E-06	0.00E+00	5.29E-06	3.78E-06	0.00E+00	5.29E-06	1.06E-05	1
229	10.939	42.475	4	6.58E-07	0.00E+00	9.21E-07	6.58E-07	0.00E+00	9.21E-07	1.84E-06	1
232	9.283	48.051	5	1.31E+00	9.87E+01	1.83E+00	1.31E+00	9.87E+01	6.93E+02	6.95E+02	8
233	9.076	48.344	5	1.42E-01	5.74E-01	1.99E-01	1.42E-01	5.74E-01	4.22E+00	4.42E+00	3
234	9.171	48.201	5	7.32E-01	1.74E+01	1.02E+00	7.32E-01	1.74E+01	1.23E+02	1.24E+02	8
235	10.014	46.937	5	3.28E+00	1.80E+02	4.59E+00	3.28E+00	1.80E+02	1.26E+03	1.27E+03	8
236	9.223	48.060	5	1.11E+00	5.00E+01	1.55E+00	1.11E+00	5.00E+01	3.52E+02	3.53E+02	8
237	9.156	48.309	5	5.92E-01	9.52E+00	8.29E-01	5.92E-01	9.52E+00	6.75E+01	6.83E+01	7
238	8.987	48.346	5	2.62E-04	0.00E+00	3.67E-04	2.62E-04	0.00E+00	3.67E-04	7.34E-04	1
239	10.579	46.422	5	4.29E-05	0.00E+00	6.01E-05	4.29E-05	0.00E+00	6.01E-05	1.20E-04	1
240	10.491	42.450	5	1.75E-01	3.48E+00	2.45E-01	1.75E-01	3.48E+00	2.46E+01	2.49E+01	5
243	10.126	46.910	5	1.88E+00	6.70E+01	2.63E+00	1.88E+00	6.70E+01	4.72E+02	4.74E+02	8
244	10.336	46.922	5	1.21E-01	8.39E-01	1.69E-01	1.21E-01	8.39E-01	6.04E+00	6.21E+00	4
247	10.846	42.387	5	1.21E-04	0.00E+00	1.69E-04	1.21E-04	0.00E+00	1.69E-04	3.39E-04	1
248	10.955	42.100	5	2.25E-06	0.00E+00	3.15E-06	2.25E-06	0.00E+00	3.15E-06	6.30E-06	1
249	10.362	46.339	5	1.62E-01	1.34E+00	2.27E-01	1.62E-01	1.34E+00	9.61E+00	9.83E+00	4
250	9.367	45.631	5	1.80E+00	7.56E+01	2.52E+00	1.80E+00	7.56E+01	5.32E+02	5.34E+02	8
251	9.378	45.682	5	1.81E+00	7.64E+01	2.53E+00	1.81E+00	7.64E+01	5.37E+02	5.40E+02	8
252	9.381	45.733	5	1.82E+00	7.77E+01	2.55E+00	1.82E+00	7.77E+01	5.46E+02	5.49E+02	8
255	9.070	49.530	7	2.23E-02	0.00E+00	3.12E-02	2.23E-02	0.00E+00	3.12E-02	6.24E-02	1
261	9.121	46.815	2	6.78E-01	2.04E+01	9.49E-01	6.78E-01	2.04E+01	1.44E+02	1.45E+02	8
264	10.880	42.213	6	3.12E-06	0.00E+00	4.37E-06	3.12E-06	0.00E+00	4.37E-06	8.74E-06	1
265	11.038	42.174	3	2.42E-07	0.00E+00	3.39E-07	2.42E-07	0.00E+00	3.39E-07	6.78E-07	1
269	10.759	42.060	2	6.80E-03	0.00E+00	9.52E-03	6.80E-03	0.00E+00	9.52E-03	1.90E-02	1
273	10.992	42.130	4	1.29E-06	0.00E+00	1.81E-06	1.29E-06	0.00E+00	1.81E-06	3.61E-06	1
274	10.943	42.205	4	2.00E-06	0.00E+00	2.80E-06	2.00E-06	0.00E+00	2.80E-06	5.60E-06	1
275	10.922	42.146	4	2.76E-06	0.00E+00	3.86E-06	2.76E-06	0.00E+00	3.86E-06	7.73E-06	1
278	10.882	42.109	1	3.91E-06	0.00E+00	5.47E-06	3.91E-06	0.00E+00	5.47E-06	1.09E-05	1
280	11.031	42.559	2	3.70E-08	0.00E+00	5.18E-08	3.70E-08	0.00E+00	5.18E-08	1.04E-07	1
281	10.438	42.395	2	2.73E-01	6.31E+00	3.82E-01	2.73E-01	6.31E+00	4.46E+01	4.49E+01	6
282	10.719	42.175	2	7.72E-03	3.49E-03	1.08E-02	7.72E-03	3.49E-03	3.52E-02	4.60E-02	1
284	10.749	42.595	2	1.12E-04	0.00E+00	1.57E-04	1.12E-04	0.00E+00	1.57E-04	3.14E-04	1
285	9.931	47.046	2	4.10E+00	2.44E+02	5.74E+00	4.10E+00	2.44E+02	1.71E+03	1.72E+03	8
286	9.424	45.654	2	1.89E+00	7.44E+01	2.65E+00	1.89E+00	7.44E+01	5.23E+02	5.26E+02	8
291	8.926	50.343	2	3.41E-06	0.00E+00	4.77E-06	3.41E-06	0.00E+00	4.77E-06	9.55E-06	1
297	9.070	47.086	5	2.58E-01	7.48E+00	3.61E-01	2.58E-01	7.48E+00	5.27E+01	5.31E+01	7
298	9.042	47.071	5	1.05E-01	4.12E+00	1.47E-01	1.05E-01	4.12E+00	2.90E+01	2.91E+01	5
299	8.995	47.083	5	7.78E-02	1.23E+00	1.09E-01	7.78E-02	1.23E+00	8.72E+00	8.83E+00	4
300	8.958	47.076	5	5.86E-02	2.21E-01	8.20E-02	5.86E-02	2.21E-01	1.63E+00	1.71E+00	2
309	10.450	46.852	4	7.88E-05	0.00E+00	1.10E-04	7.88E-05	0.00E+00	1.10E-04	2.21E-04	1
322	10.514	42.291	4	1.50E-01	2.73E+00	2.10E-01	1.50E-01	2.73E+00	1.93E+01	1.95E+01	5
323	10.517	42.409	3	1.47E-01	2.49E+00	2.06E-01	1.47E-01	2.49E+00	1.76E+01	1.78E+01	5
324	10.448	42.294	3	2.25E-01	5.49E+00	3.15E-01	2.25E-01	5.49E+00	3.87E+01	3.91E+01	6
325	10.492	42.500	9	1.74E-01	3.39E+00	2.44E-01	1.74E-01	3.39E+00	2.40E+01	2.42E+01	5

Case 2: Protected				4 rounds at aimpoint (10.20, 48.50)							
102	10.494	46.773	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E+01	5.26E+02	5.26E+02	8
103	9.999	46.817	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-01	3.31E+00	3.31E+00	3
104	10.012	47.018	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-01	2.12E+00	2.12E+00	2
107	10.338	46.997	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E+00	2.18E+01	2.18E+01	5

Table C4
VX Exposures
Heavy Brigade, Forward Maneuver Battalion, Offense

113	10.612	46.387	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-01	3.47E+00	3.47E+00	3
114	10.539	46.317	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E+00	7.14E+00	7.14E+00	4
115	10.400	46.322	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E+00	1.15E+01	1.15E+01	4
151	10.364	46.506	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E+01	1.33E+02	1.33E+02	8
152	10.429	46.678	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E+01	5.10E+02	5.10E+02	8
153	10.617	46.667	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E+00	2.28E+01	2.28E+01	5
155	10.362	46.610	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E+01	1.17E+02	1.17E+02	8
164	10.250	46.682	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E+00	2.50E+01	2.50E+01	5
197	10.503	46.322	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E+00	1.09E+01	1.09E+01	4
198	9.994	46.745	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-01	3.13E+00	3.13E+00	3
199	10.245	46.833	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-01	5.30E+00	5.30E+00	3
235	10.014	46.937	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-01	2.61E+00	2.61E+00	2
239	10.579	46.422	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E+00	2.41E+01	2.41E+01	5
244	10.336	46.922	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E+00	4.37E+01	4.37E+01	6
249	10.362	46.339	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E+01	1.43E+02	1.43E+02	8
285	9.931	47.046	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E+01	3.54E+02	3.54E+02	8
309	10.450	46.852	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E+01	6.00E+02	6.00E+02	8

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

Mustard (HD) 152mm Artillery
 Light Attack
 Height of Release: 15m

Case 1: Unprotected (Eye,
 Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (7.85, 48.60)									
23	7.914	48.242	2	9.53E+00	4.02E+01	6.70E+01	2	1	2
28	7.866	48.313	2	4.06E+01	1.25E+02	2.19E+02	2	1	3
129	7.927	48.331	4	1.60E+01	7.31E+01	1.20E+02	2	1	3
193	7.974	48.204	2	2.58E-06	0.00E+00	2.58E-06	1	1	1
194	7.911	48.293	2	2.35E+01	8.40E+01	1.44E+02	2	1	3
210	7.880	48.198	2	5.30E+00	1.54E+01	2.73E+01	2	1	2
221	7.866	48.425	4	2.61E+02	6.73E+02	1.22E+03	6	6	6
222	7.904	48.425	4	1.33E+02	1.71E+02	3.77E+02	5	4	4
223	7.951	48.433	4	2.29E-01	1.27E-01	4.10E-01	1	1	1
224	7.819	48.424	4	8.23E+01	9.16E+01	2.13E+02	4	3	3
225	7.929	48.300	4	1.39E+01	6.77E+01	1.11E+02	2	1	3
256	7.785	48.318	2	3.88E-05	0.00E+00	3.88E-05	1	1	1
258	7.892	48.149	2	5.00E+00	1.53E+01	2.69E+01	2	1	2
259	7.839	48.229	3	1.06E+01	3.83E+01	6.53E+01	2	1	2
293	7.936	48.474	5	5.77E+02	2.31E+03	3.88E+03	6	6	7
294	7.870	48.475	5	2.85E+02	1.42E+02	4.88E+02	6	6	4
295	7.829	48.482	5	2.52E+02	3.68E+03	5.51E+03	6	6	8
296	7.905	48.473	5	3.00E+02	2.22E+02	6.17E+02	6	6	5

Case 2a: Protected (Eye,
 Respiratory Exposure)

18 rounds at aimpoint (9.10, 46.85)									
128	9.059	46.875	4	1.01E-01	7.26E+02	1.01E-01	1	1	
191	9.196	46.746	2	7.63E-02	3.08E+01	7.63E-02	1	1	
192	9.123	46.758	2	2.43E-02	2.77E+01	2.43E-02	1	1	
216	9.062	46.820	4	3.66E-01	7.54E+02	3.66E-01	1	1	
261	9.121	46.815	2	1.75E-03	1.05E+01	1.75E-03	1	1	

Case 2b: Protected (Skin
 Exposure)

18 rounds at aimpoint (9.10, 46.85)									
128	9.059	46.875	4	1.24E+00	2.08E+03	2.97E+03			7
191	9.196	46.746	2	1.10E+00	8.82E+01	1.27E+02			3
192	9.123	46.758	2	3.32E-01	7.92E+01	1.13E+02			3
216	9.062	46.820	4	4.70E+00	2.16E+03	3.09E+03			7
261	9.121	46.815	2	2.88E-02	3.00E+01	4.29E+01			2

Mustard (HD) MRLS
 Moderate Attack
 Height of Release: 15m

Case 1: Unprotected (Eye,
 Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (9.00, 52.00)									
3	8.693	50.315	4	3.30E+01	0.00E+00	3.30E+01	2	1	2
4	9.225	50.221	4	1.18E+02	0.00E+00	1.18E+02	5	4	3
5	9.374	50.524	4	5.03E+00	0.00E+00	5.03E+00	2	1	1
6	9.225	50.524	4	1.19E+02	0.00E+00	1.19E+02	5	4	3
7	9.097	50.534	4	1.03E+02	0.00E+00	1.03E+02	5	4	3
8	8.954	50.542	4	1.30E+02	0.00E+00	1.30E+02	5	4	3
9	8.617	50.560	4	2.14E+00	0.00E+00	2.14E+00	1	1	1
15	9.347	45.818	3	1.05E+01	0.00E+00	1.05E+01	2	1	1
16	9.315	45.716	2	1.57E+01	0.00E+00	1.57E+01	2	1	1
17	8.700	49.576	2	3.64E+01	0.00E+00	3.64E+01	2	1	2
18	9.008	49.534	2	1.28E+02	0.00E+00	1.28E+02	5	4	3
25	9.203	47.020	2	5.99E+01	0.00E+00	5.99E+01	3	2	2
27	9.010	46.883	2	6.88E+01	0.00E+00	6.88E+01	3	2	2
29	9.155	46.980	2	6.45E+01	0.00E+00	6.45E+01	3	2	2
32	9.162	45.542	2	3.09E+01	0.00E+00	3.09E+01	2	1	2
33	9.134	45.693	1	3.52E+01	0.00E+00	3.52E+01	2	1	2
34	9.236	45.448	2	2.52E+01	0.00E+00	2.52E+01	2	1	2
36	9.184	45.669	1	3.36E+01	0.00E+00	3.36E+01	2	1	2
37	9.376	45.557	2	4.71E+00	0.00E+00	4.71E+00	1	1	1

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

41	9.312	45.638	2	1.53E+01	0.00E+00	1.53E+01	2	1	1
50	9.107	49.460	2	1.09E+02	0.00E+00	1.09E+02	5	4	3
51	9.325	48.044	2	3.48E+01	0.00E+00	3.48E+01	2	1	2
52	9.035	48.198	2	9.57E+01	0.00E+00	9.57E+01	4	3	2
54	9.191	48.044	2	8.20E+01	0.00E+00	8.20E+01	4	3	2
70	9.286	45.768	3	2.21E+01	0.00E+00	2.21E+01	2	1	1
98	8.568	49.822	9	5.43E-01	0.00E+00	5.43E-01	1	1	1
99	8.667	49.854	9	1.97E+01	0.00E+00	1.97E+01	2	1	1
100	8.855	49.854	4	1.08E+02	0.00E+00	1.08E+02	5	4	3
101	8.983	49.851	9	1.34E+02	0.00E+00	1.34E+02	5	4	3
124	9.209	45.648	6	3.19E+01	0.00E+00	3.19E+01	2	1	2
125	9.207	45.539	4	2.97E+01	0.00E+00	2.97E+01	2	1	2
127	8.809	48.886	3	8.23E+01	0.00E+00	8.23E+01	4	3	2
128	9.059	46.875	4	6.66E+01	0.00E+00	6.66E+01	3	2	2
136	8.845	49.551	3	1.04E+02	0.00E+00	1.04E+02	5	4	3
137	8.931	49.541	3	1.27E+02	0.00E+00	1.27E+02	5	4	3
143	9.168	48.069	2	8.50E+01	0.00E+00	8.50E+01	4	3	2
144	9.281	48.111	3	5.46E+01	0.00E+00	5.46E+01	3	2	2
145	9.077	48.397	3	9.62E+01	0.00E+00	9.62E+01	4	3	2
146	9.170	48.242	3	8.83E+01	0.00E+00	8.83E+01	4	3	2
147	9.224	48.123	3	7.56E+01	0.00E+00	7.56E+01	4	3	2
149	9.103	48.033	3	8.89E+01	0.00E+00	8.89E+01	4	3	2
150	9.155	48.357	3	9.21E+01	0.00E+00	9.21E+01	4	3	2
161	9.225	46.968	2	5.41E+01	0.00E+00	5.41E+01	3	2	2
166	8.984	48.395	3	1.04E+02	0.00E+00	1.04E+02	5	4	3
167	9.347	45.802	3	1.04E+01	0.00E+00	1.04E+01	2	1	1
171	9.409	49.498	4	3.35E+00	0.00E+00	3.35E+00	1	1	1
190	9.092	48.131	8	9.11E+01	0.00E+00	9.11E+01	4	3	2
191	9.196	46.746	2	5.54E+01	0.00E+00	5.54E+01	3	2	2
192	9.123	46.758	2	6.15E+01	0.00E+00	6.15E+01	3	2	2
200	9.182	45.726	2	3.50E+01	0.00E+00	3.50E+01	2	1	2
201	9.312	45.828	2	1.77E+01	0.00E+00	1.77E+01	2	1	1
202	9.294	45.449	2	1.61E+01	0.00E+00	1.61E+01	2	1	1
203	9.405	45.436	2	1.37E+00	0.00E+00	1.37E+00	1	1	1
204	9.256	48.008	2	6.35E+01	0.00E+00	6.35E+01	3	2	2
213	9.046	48.117	3	9.33E+01	0.00E+00	9.33E+01	4	3	2
214	9.112	48.189	3	9.11E+01	0.00E+00	9.11E+01	4	3	2
216	9.062	46.820	4	6.51E+01	0.00E+00	6.51E+01	3	2	2
217	9.083	47.027	4	6.96E+01	0.00E+00	6.96E+01	3	2	2
218	9.051	47.019	4	7.05E+01	0.00E+00	7.05E+01	4	3	2
219	9.013	47.028	4	7.22E+01	0.00E+00	7.22E+01	4	3	2
220	8.964	47.019	4	7.33E+01	0.00E+00	7.33E+01	4	3	2
232	9.283	48.051	5	5.30E+01	0.00E+00	5.30E+01	3	2	2
233	9.076	48.344	5	9.54E+01	0.00E+00	9.54E+01	4	3	2
234	9.171	48.201	5	8.74E+01	0.00E+00	8.74E+01	4	3	2
236	9.223	48.060	5	7.47E+01	0.00E+00	7.47E+01	4	3	2
237	9.156	48.309	5	9.11E+01	0.00E+00	9.11E+01	4	3	2
238	8.987	48.346	5	1.02E+02	0.00E+00	1.02E+02	5	4	3
250	9.367	45.631	5	6.20E+00	0.00E+00	6.20E+00	2	1	1
251	9.378	45.682	5	5.33E+00	0.00E+00	5.33E+00	2	1	1
252	9.381	45.733	5	5.30E+00	0.00E+00	5.30E+00	2	1	1
253	8.778	49.558	4	7.71E+01	0.00E+00	7.71E+01	4	3	2
255	9.070	49.530	7	1.13E+02	0.00E+00	1.13E+02	5	4	3
261	9.121	46.815	2	6.28E+01	0.00E+00	6.28E+01	3	2	2
286	9.424	45.654	2	1.38E+00	0.00E+00	1.38E+00	1	1	1
291	8.926	50.343	2	1.33E+02	0.00E+00	1.33E+02	5	4	3
297	9.070	47.086	5	7.12E+01	0.00E+00	7.12E+01	4	3	2
298	9.042	47.071	5	7.19E+01	0.00E+00	7.19E+01	4	3	2
299	8.995	47.083	5	7.42E+01	0.00E+00	7.42E+01	4	3	2
300	8.958	47.076	5	7.47E+01	0.00E+00	7.47E+01	4	3	2
304	8.733	49.028	4	5.20E+01	0.00E+00	5.20E+01	3	2	2
305	8.648	49.028	4	1.48E+01	0.00E+00	1.48E+01	2	1	1
306	8.827	49.020	4	9.19E+01	0.00E+00	9.19E+01	4	3	2
307	8.583	50.301	4	1.67E-01	0.00E+00	1.67E-01	1	1	1
240 rounds at aimpoint (9.20, 48.50)									
25	9.203	47.020	2	3.27E-01	0.00E+00	3.27E-01	1	1	
29	9.155	46.980	2	6.54E-02	0.00E+00	6.54E-02	1	1	

Case 2a: Protected (Eye,
Respiratory Exposure)

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

51	9.325	48.044	2	5.94E+00	1.43E+02	5.94E+00	2	1	
52	9.035	48.198	2	2.94E+00	4.03E+02	2.94E+00	1	1	
54	9.191	48.044	2	8.86E+00	1.77E+02	8.86E+00	2	1	
143	9.168	48.069	2	7.42E+00	1.05E+02	7.42E+00	2	1	
144	9.281	48.111	3	3.77E+00	2.51E+02	3.77E+00	1	1	
145	9.077	48.397	3	3.16E-01	1.91E+01	3.16E-01	1	1	
146	9.170	48.242	3	2.77E+00	1.39E+02	2.77E+00	1	1	
147	9.224	48.123	3	4.07E+00	9.29E+01	4.07E+00	1	1	
149	9.103	48.033	3	6.10E+00	1.08E+02	6.10E+00	2	1	
150	9.155	48.357	3	1.27E+00	2.77E+02	1.27E+00	1	1	
161	9.225	46.968	2	1.05E-01	0.00E+00	1.05E-01	1	1	
166	8.984	48.395	3	3.88E-02	3.00E+00	3.88E-02	1	1	
190	9.092	48.131	8	3.60E+00	2.66E+02	3.60E+00	1	1	
204	9.256	48.008	2	6.66E+00	9.56E+01	6.66E+00	2	1	
213	9.046	48.117	3	6.02E+00	4.74E+02	6.02E+00	2	1	
214	9.112	48.189	3	2.72E+00	2.01E+02	2.72E+00	1	1	
217	9.083	47.027	4	1.62E-01	0.00E+00	1.62E-01	1	1	
218	9.051	47.019	4	1.59E-02	0.00E+00	1.59E-02	1	1	
219	9.013	47.028	4	6.51E-03	0.00E+00	6.51E-03	1	1	
220	8.964	47.019	4	1.14E-03	0.00E+00	1.14E-03	1	1	
232	9.283	48.051	5	6.26E+00	2.07E+02	6.26E+00	2	1	
233	9.076	48.344	5	4.86E-01	2.32E+02	4.86E-01	1	1	
234	9.171	48.201	5	3.77E+00	1.04E+02	3.77E+00	1	1	
236	9.223	48.060	5	6.46E+00	3.36E+02	6.46E+00	2	1	
237	9.156	48.309	5	1.61E+00	1.81E+02	1.61E+00	1	1	
238	8.987	48.346	5	5.75E-02	1.06E+02	5.75E-02	1	1	
297	9.070	47.086	5	1.51E-01	0.00E+00	1.51E-01	1	1	
298	9.042	47.071	5	1.51E-02	0.00E+00	1.51E-02	1	1	
299	8.995	47.083	5	5.63E-03	0.00E+00	5.63E-03	1	1	
300	8.958	47.076	5	9.62E-04	0.00E+00	9.62E-04	1	1	

Case 2b: Protected (Skin Exposure)

240 rounds at aimpoint (9.20, 48.50)

15	9.347	45.818	3	2.75E+01	0.00E+00	2.75E+01			2
16	9.315	45.716	2	1.32E+01	0.00E+00	1.32E+01			1
25	9.203	47.020	2	1.27E+02	0.00E+00	1.27E+02			3
27	9.010	46.883	2	8.86E+01	0.00E+00	8.86E+01			2
29	9.155	46.980	2	1.23E+02	0.00E+00	1.23E+02			3
32	9.162	45.542	2	5.72E+00	0.00E+00	5.72E+00			1
33	9.134	45.693	1	1.55E+01	0.00E+00	1.55E+01			1
34	9.236	45.448	2	1.43E+00	0.00E+00	1.43E+00			1
36	9.184	45.669	1	1.44E+01	0.00E+00	1.44E+01			1
37	9.376	45.557	2	4.30E+00	0.00E+00	4.30E+00			1
41	9.312	45.638	2	8.08E+00	0.00E+00	8.08E+00			1
51	9.325	48.044	2	1.76E+01	4.08E+02	6.00E+02			5
52	9.035	48.198	2	9.20E+00	1.15E+03	1.65E+03			7
54	9.191	48.044	2	2.58E+01	5.05E+02	7.47E+02			5
66	9.451	45.758	2	1.45E+01	0.00E+00	1.45E+01			1
70	9.286	45.768	3	2.01E+01	0.00E+00	2.01E+01			1
124	9.209	45.648	6	1.23E+01	0.00E+00	1.23E+01			1
125	9.207	45.539	4	5.12E+00	0.00E+00	5.12E+00			1
128	9.059	46.875	4	1.09E+02	0.00E+00	1.09E+02			3
143	9.168	48.069	2	2.18E+01	3.00E+02	4.50E+02			4
144	9.281	48.111	3	1.14E+01	7.19E+02	1.04E+03			6
145	9.077	48.397	3	1.31E+00	5.46E+01	7.93E+01			2
146	9.170	48.242	3	8.46E+00	3.98E+02	5.77E+02			5
147	9.224	48.123	3	1.23E+01	2.66E+02	3.92E+02			4
149	9.103	48.033	3	1.79E+01	3.09E+02	4.59E+02			4
150	9.155	48.357	3	3.97E+00	7.92E+02	1.14E+03			6
161	9.225	46.968	2	1.20E+02	0.00E+00	1.20E+02			3
166	8.984	48.395	3	1.56E-01	8.58E+00	1.24E+01			1
167	9.347	45.802	3	2.54E+01	0.00E+00	2.54E+01			2
190	9.092	48.131	8	1.09E+01	7.62E+02	1.10E+03			6
191	9.196	46.746	2	1.32E+02	0.00E+00	1.32E+02			3
192	9.123	46.758	2	1.23E+02	0.00E+00	1.23E+02			3
200	9.182	45.726	2	2.04E+01	0.00E+00	2.04E+01			1
201	9.312	45.828	2	2.74E+01	0.00E+00	2.74E+01			2
202	9.294	45.449	2	9.89E-01	0.00E+00	9.89E-01			1
203	9.405	45.436	2	8.60E-01	0.00E+00	8.60E-01			1

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

204	9.256	48.008	2	1.96E+01	2.73E+02	4.10E+02			4
213	9.046	48.117	3	1.83E+01	1.36E+03	1.96E+03			7
214	9.112	48.189	3	8.32E+00	5.76E+02	8.31E+02			6
216	9.062	46.820	4	1.09E+02	0.00E+00	1.09E+02			3
217	9.083	47.027	4	1.13E+02	0.00E+00	1.13E+02			3
218	9.051	47.019	4	1.06E+02	0.00E+00	1.06E+02			3
219	9.013	47.028	4	8.74E+01	0.00E+00	8.74E+01			2
220	8.964	47.019	4	7.04E+01	0.00E+00	7.04E+01			2
232	9.283	48.051	5	1.84E+01	5.93E+02	8.66E+02			6
233	9.076	48.344	5	2.02E+00	6.63E+02	9.49E+02			6
234	9.171	48.201	5	1.13E+01	2.99E+02	4.38E+02			4
236	9.223	48.060	5	1.90E+01	9.60E+02	1.39E+03			6
237	9.156	48.309	5	5.05E+00	5.17E+02	7.44E+02			5
238	8.987	48.346	5	2.31E-01	3.03E+02	4.33E+02			4
250	9.367	45.631	5	8.13E+00	0.00E+00	8.13E+00			1
251	9.378	45.682	5	1.06E+01	0.00E+00	1.06E+01			1
252	9.381	45.733	5	1.60E+01	0.00E+00	1.60E+01			1
261	9.121	46.815	2	1.23E+02	0.00E+00	1.23E+02			3
286	9.424	45.654	2	7.74E+00	0.00E+00	7.74E+00			1
297	9.070	47.086	5	1.09E+02	0.00E+00	1.09E+02			3
298	9.042	47.071	5	1.01E+02	0.00E+00	1.01E+02			3
299	8.995	47.083	5	7.81E+01	0.00E+00	7.81E+01			2
300	8.958	47.076	5	6.77E+01	0.00E+00	6.77E+01			2

Mustard (HD) MRLS
Heavy Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (10.70, 52.00)									
13	11.260	50.508	4	3.62E+01	0.00E+00	3.62E+01	2	1	2
21	11.369	49.655	1	1.12E+00	0.00E+00	1.12E+00	1	1	1
22	11.177	49.570	2	1.16E+02	0.00E+00	1.16E+02	5	4	3
30	10.093	49.471	2	1.53E+01	0.00E+00	1.53E+01	2	1	1
40	10.792	42.386	5	1.40E+02	0.00E+00	1.40E+02	5	4	3
43	10.740	42.320	1	1.41E+02	0.00E+00	1.41E+02	5	4	3
44	10.438	42.496	2	1.25E+02	0.00E+00	1.25E+02	5	4	3
48	10.165	46.551	1	6.69E+01	0.00E+00	6.69E+01	3	2	2
71	10.734	42.486	1	1.44E+02	0.00E+00	1.44E+02	5	4	3
72	10.680	42.398	1	1.43E+02	0.00E+00	1.43E+02	5	4	3
73	10.841	42.495	1	1.39E+02	0.00E+00	1.39E+02	5	4	3
74	11.272	50.379	3	2.83E+01	0.00E+00	2.83E+01	2	1	2
75	10.670	50.291	3	2.14E+02	0.00E+00	2.14E+02	6	5	3
90	10.433	50.482	9	2.13E+02	4.65E-02	2.13E+02	6	5	3
91	10.532	50.469	9	2.22E+02	1.53E+00	2.24E+02	6	5	3
92	10.618	50.471	4	2.18E+02	1.74E+00	2.20E+02	6	5	3
93	10.714	50.458	9	2.13E+02	4.86E-01	2.14E+02	6	5	3
94	10.806	50.458	9	2.27E+02	2.98E-01	2.27E+02	6	5	3
95	10.886	50.463	9	1.85E+02	3.98E-01	1.86E+02	6	5	3
96	10.965	50.466	4	1.70E+02	4.22E-02	1.70E+02	6	5	3
97	11.080	50.466	9	1.83E+02	0.00E+00	1.83E+02	6	5	3
102	10.494	46.773	3	2.01E+02	0.00E+00	2.01E+02	6	5	3
103	9.999	46.817	1	8.69E+00	0.00E+00	8.69E+00	2	1	1
104	10.012	47.018	4	1.08E+01	0.00E+00	1.08E+01	2	1	1
105	10.124	47.005	4	4.81E+01	0.00E+00	4.81E+01	2	1	2
106	10.228	47.008	2	1.03E+02	0.00E+00	1.03E+02	5	4	3
107	10.338	46.997	4	1.61E+02	0.00E+00	1.61E+02	6	5	3
108	10.752	46.815	4	2.16E+02	0.00E+00	2.16E+02	6	5	3
109	10.818	46.635	4	2.08E+02	0.00E+00	2.08E+02	6	5	3
110	10.859	46.478	4	2.00E+02	0.00E+00	2.00E+02	6	5	3
111	10.656	46.929	2	2.19E+02	0.00E+00	2.19E+02	6	5	3
112	10.708	46.424	4	2.10E+02	0.00E+00	2.10E+02	6	5	3
113	10.612	46.387	4	2.07E+02	0.00E+00	2.07E+02	6	5	3
114	10.539	46.317	2	1.99E+02	0.00E+00	1.99E+02	6	5	3

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

115	10.400	46.322	4	1.73E+02	0.00E+00	1.73E+02	6	5	3
116	10.166	49.480	5	7.01E+01	0.00E+00	7.01E+01	4	3	2
117	10.234	49.391	3	1.26E+02	0.00E+00	1.26E+02	5	4	3
130	10.790	42.307	3	1.39E+02	0.00E+00	1.39E+02	5	4	3
131	10.723	42.397	2	1.42E+02	0.00E+00	1.42E+02	5	4	3
135	10.895	42.320	2	1.31E+02	0.00E+00	1.31E+02	5	4	3
138	11.245	49.685	3	5.76E+01	0.00E+00	5.76E+01	3	2	2
140	11.090	42.435	2	9.36E+01	0.00E+00	9.36E+01	4	3	2
141	10.957	42.331	2	1.24E+02	0.00E+00	1.24E+02	5	4	3
142	10.598	42.284	2	1.40E+02	0.00E+00	1.40E+02	5	4	3
151	10.364	46.506	2	1.64E+02	0.00E+00	1.64E+02	6	5	3
152	10.429	46.678	6	1.86E+02	0.00E+00	1.86E+02	6	5	3
153	10.617	46.667	4	2.12E+02	0.00E+00	2.12E+02	6	5	3
154	11.217	49.446	4	8.31E+01	0.00E+00	8.31E+01	4	3	2
155	10.362	46.610	4	1.65E+02	0.00E+00	1.65E+02	6	5	3
157	11.013	42.282	2	1.12E+02	0.00E+00	1.12E+02	5	4	3
158	10.148	49.313	4	5.40E+01	0.00E+00	5.40E+01	3	2	2
159	11.226	49.815	2	7.63E+01	0.00E+00	7.63E+01	4	3	2
164	10.250	46.682	3	1.12E+02	0.00E+00	1.12E+02	5	4	3
172	10.079	49.696	4	8.77E+00	0.00E+00	8.77E+00	2	1	1
174	10.064	46.471	4	2.58E+01	0.00E+00	2.58E+01	2	1	2
176	10.057	46.658	4	2.30E+01	0.00E+00	2.30E+01	2	1	1
177	9.973	46.643	4	5.83E+00	0.00E+00	5.83E+00	2	1	1
180	10.861	43.129	4	1.48E+02	0.00E+00	1.48E+02	5	4	3
181	11.213	43.174	4	6.21E+01	0.00E+00	6.21E+01	3	2	2
182	10.559	43.004	4	1.49E+02	0.00E+00	1.49E+02	5	4	3
195	10.224	46.931	2	1.00E+02	0.00E+00	1.00E+02	5	4	3
196	10.654	46.844	2	2.17E+02	0.00E+00	2.17E+02	6	5	3
197	10.503	46.322	2	1.95E+02	0.00E+00	1.95E+02	6	5	3
198	9.994	46.745	2	8.28E+00	0.00E+00	8.28E+00	2	1	1
199	10.245	46.833	2	1.11E+02	0.00E+00	1.11E+02	5	4	3
206	10.774	42.454	2	1.42E+02	0.00E+00	1.42E+02	5	4	3
207	10.948	42.402	2	1.26E+02	0.00E+00	1.26E+02	5	4	3
208	11.091	42.478	2	9.39E+01	0.00E+00	9.39E+01	4	3	2
209	10.869	42.349	2	1.34E+02	0.00E+00	1.34E+02	5	4	3
211	10.748	42.548	2	1.44E+02	0.00E+00	1.44E+02	5	4	3
226	10.758	42.201	4	1.38E+02	0.00E+00	1.38E+02	5	4	3
227	10.836	42.132	4	1.33E+02	0.00E+00	1.33E+02	5	4	3
228	10.859	42.183	4	1.32E+02	0.00E+00	1.32E+02	5	4	3
229	10.939	42.475	4	1.28E+02	0.00E+00	1.28E+02	5	4	3
235	10.014	46.937	5	1.15E+01	0.00E+00	1.15E+01	2	1	1
239	10.579	46.422	5	2.05E+02	0.00E+00	2.05E+02	6	5	3
240	10.491	42.450	5	1.32E+02	0.00E+00	1.32E+02	5	4	3
241	10.706	46.484	5	2.12E+02	0.00E+00	2.12E+02	6	5	3
242	10.798	46.470	5	2.07E+02	0.00E+00	2.07E+02	6	5	3
243	10.126	46.910	5	4.89E+01	0.00E+00	4.89E+01	2	1	2
244	10.336	46.922	5	1.58E+02	0.00E+00	1.58E+02	6	5	3
245	10.750	46.730	5	2.15E+02	0.00E+00	2.15E+02	6	5	3
246	10.818	46.559	5	2.06E+02	0.00E+00	2.06E+02	6	5	3
247	10.846	42.387	5	1.37E+02	0.00E+00	1.37E+02	5	4	3
248	10.955	42.100	5	1.21E+02	0.00E+00	1.21E+02	5	4	3
249	10.362	46.339	5	1.60E+02	0.00E+00	1.60E+02	6	5	3
254	11.364	49.446	4	2.28E+00	0.00E+00	2.28E+00	1	1	1
264	10.880	42.213	6	1.31E+02	0.00E+00	1.31E+02	5	4	3
265	11.038	42.174	3	1.04E+02	0.00E+00	1.04E+02	5	4	3
269	10.759	42.060	2	1.35E+02	0.00E+00	1.35E+02	5	4	3
270	11.077	42.122	2	9.34E+01	0.00E+00	9.34E+01	4	3	2
273	10.992	42.130	4	1.14E+02	0.00E+00	1.14E+02	5	4	3
274	10.943	42.205	4	1.24E+02	0.00E+00	1.24E+02	5	4	3
275	10.922	42.146	4	1.25E+02	0.00E+00	1.25E+02	5	4	3
276	11.113	42.169	4	8.41E+01	0.00E+00	8.41E+01	4	3	2
277	10.886	42.648	1	1.38E+02	0.00E+00	1.38E+02	5	4	3
278	10.882	42.109	1	1.29E+02	0.00E+00	1.29E+02	5	4	3
279	11.151	42.140	1	7.29E+01	0.00E+00	7.29E+01	4	3	2
280	11.031	42.559	2	1.11E+02	0.00E+00	1.11E+02	5	4	3
281	10.438	42.395	2	1.23E+02	0.00E+00	1.23E+02	5	4	3
282	10.719	42.175	2	1.38E+02	0.00E+00	1.38E+02	5	4	3

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

284	10.749	42.595	2	1.45E+02	0.00E+00	1.45E+02	5	4	3
285	9.931	47.046	2	1.38E+00	0.00E+00	1.38E+00	1	1	1
290	10.956	50.319	2	1.73E+02	0.00E+00	1.73E+02	6	5	3
309	10.450	46.852	4	1.94E+02	0.00E+00	1.94E+02	6	5	3
310	11.183	50.374	4	1.10E+02	0.00E+00	1.10E+02	5	4	3
321	11.110	42.321	1	8.67E+01	0.00E+00	8.67E+01	4	3	2
322	10.514	42.291	4	1.33E+02	0.00E+00	1.33E+02	5	4	3
323	10.517	42.409	3	1.35E+02	0.00E+00	1.35E+02	5	4	3
324	10.448	42.294	3	1.23E+02	0.00E+00	1.23E+02	5	4	3
325	10.492	42.500	9	1.33E+02	0.00E+00	1.33E+02	5	4	3

**Case 2a: Protected (Eye,
Respiratory Exposure)**

720 rounds at aimpoint (9.05, 50.95)

3	8.693	50.315	4	1.60E-01	4.18E+00	1.60E-01	1	1	
4	9.225	50.221	4	7.33E-01	1.18E+01	7.33E-01	1	1	
5	9.374	50.524	4	7.51E-01	7.07E+01	7.51E-01	1	1	
6	9.225	50.524	4	9.89E-01	5.39E+01	9.89E-01	1	1	
7	9.097	50.534	4	1.62E+00	1.03E+02	1.62E+00	1	1	
8	8.954	50.542	4	3.23E-02	1.22E-01	3.23E-02	1	1	
9	8.617	50.560	4	1.79E-02	4.06E+01	1.79E-02	1	1	
17	8.700	49.576	2	2.42E-01	0.00E+00	2.42E-01	1	1	
18	9.008	49.534	2	7.60E-01	4.99E-01	7.60E-01	1	1	
50	9.107	49.460	2	2.19E+00	2.58E-01	2.19E+00	1	1	
98	8.568	49.822	9	1.47E-01	1.18E-01	1.47E-01	1	1	
99	8.667	49.854	9	1.32E+00	9.30E+00	1.32E+00	1	1	
100	8.855	49.854	4	6.86E-01	1.99E+01	6.86E-01	1	1	
101	8.983	49.851	9	4.31E-01	3.57E+01	4.31E-01	1	1	
136	8.845	49.551	3	1.24E+00	4.84E-01	1.24E+00	1	1	
137	8.931	49.541	3	1.93E+00	1.69E-01	1.93E+00	1	1	
170	9.510	49.506	4	1.79E-01	0.00E+00	1.79E-01	1	1	
171	9.409	49.498	4	9.68E-01	0.00E+00	9.68E-01	1	1	
253	8.778	49.558	4	4.43E-02	0.00E+00	4.43E-02	1	1	
255	9.070	49.530	7	1.30E+00	5.61E-01	1.30E+00	1	1	
291	8.926	50.343	2	5.56E-02	6.74E+01	5.56E-02	1	1	
307	8.583	50.301	4	1.98E-01	7.33E-01	1.98E-01	1	1	

**Case 2b: Protected (Skin
Exposure)**

720 rounds at aimpoint (9.05, 50.95)

3	8.693	50.315	4	1.50E+01	1.03E+02	1.62E+02			3
4	9.225	50.221	4	3.82E+01	3.34E+02	5.15E+02			5
5	9.374	50.524	4	5.28E+00	5.29E+02	7.61E+02			6
6	9.225	50.524	4	1.44E+01	4.37E+02	6.39E+02			5
7	9.097	50.534	4	1.43E+01	4.67E+02	6.81E+02			5
8	8.954	50.542	4	1.96E+01	1.63E+02	2.52E+02			4
9	8.617	50.560	4	1.27E+00	4.33E+02	6.20E+02			5
10	8.495	50.552	4	5.88E-06	0.00E+00	5.88E-06			1
17	8.700	49.576	2	3.91E+01	8.48E-06	3.91E+01			2
18	9.008	49.534	2	7.51E+01	9.89E+00	8.92E+01			2
50	9.107	49.460	2	8.03E+01	1.60E+00	8.26E+01			2
51	9.325	48.044	2	5.79E+00	0.00E+00	5.79E+00			1
52	9.035	48.198	2	1.27E+01	0.00E+00	1.27E+01			1
54	9.191	48.044	2	3.82E+00	0.00E+00	3.82E+00			1
55	9.529	49.086	2	4.08E+01	0.00E+00	4.08E+01			2
56	9.628	49.104	2	9.96E+00	0.00E+00	9.96E+00			1
98	8.568	49.822	9	2.79E+01	1.75E+01	5.29E+01			2
99	8.667	49.854	9	4.50E+01	7.40E+01	1.51E+02			3
100	8.855	49.854	4	6.46E+01	9.66E+01	2.03E+02			3
101	8.983	49.851	9	5.31E+01	6.04E+02	9.16E+02			6
127	8.809	48.886	3	4.50E+01	0.00E+00	4.50E+01			2
136	8.845	49.551	3	6.59E+01	2.50E+00	6.95E+01			2
137	8.931	49.541	3	7.56E+01	5.04E+00	8.28E+01			2
143	9.168	48.069	2	5.07E+00	0.00E+00	5.07E+00			1
144	9.281	48.111	3	8.01E+00	0.00E+00	8.01E+00			1
145	9.077	48.397	3	2.07E+01	0.00E+00	2.07E+01			1
146	9.170	48.242	3	8.61E+00	0.00E+00	8.61E+00			1
147	9.224	48.123	3	6.29E+00	0.00E+00	6.29E+00			1
149	9.103	48.033	3	8.26E+00	0.00E+00	8.26E+00			1
150	9.155	48.357	3	1.20E+01	0.00E+00	1.20E+01			1
163	9.628	49.378	3	9.77E+00	0.00E+00	9.77E+00			1
166	8.984	48.395	3	1.43E+01	0.00E+00	1.43E+01			1
170	9.510	49.506	4	4.05E+01	0.00E+00	4.05E+01			2

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

171	9.409	49.498	4	8.49E+01	7.69E-02	8.50E+01			2
190	9.092	48.131	8	1.23E+01	0.00E+00	1.23E+01			1
204	9.256	48.008	2	4.52E+00	0.00E+00	4.52E+00			1
213	9.046	48.117	3	1.15E+01	0.00E+00	1.15E+01			1
214	9.112	48.189	3	1.29E+01	0.00E+00	1.29E+01			1
232	9.283	48.051	5	6.15E+00	0.00E+00	6.15E+00			1
233	9.076	48.344	5	1.82E+01	0.00E+00	1.82E+01			1
234	9.171	48.201	5	7.84E+00	0.00E+00	7.84E+00			1
236	9.223	48.060	5	4.79E+00	0.00E+00	4.79E+00			1
237	9.156	48.309	5	1.07E+01	0.00E+00	1.07E+01			1
238	8.987	48.346	5	1.28E+01	0.00E+00	1.28E+01			1
253	8.778	49.558	4	6.91E+01	3.55E+00	7.42E+01			2
255	9.070	49.530	7	7.06E+01	2.53E+00	7.42E+01			2
291	8.926	50.343	2	2.68E+01	2.41E+02	3.71E+02			4
304	8.733	49.028	4	4.56E+01	0.00E+00	4.56E+01			2
305	8.648	49.028	4	3.53E+01	0.00E+00	3.53E+01			2
306	8.827	49.020	4	5.17E+01	0.00E+00	5.17E+01			2
307	8.583	50.301	4	7.63E+00	4.64E+02	6.70E+02			5

Mustard (HD) 250kg Bomb
Light Attack
Height of Release: 70m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (7.75, 48.65)									
23	7.914	48.242	2	1.45E+02	2.95E+02	5.66E+02	5	4	5
28	7.866	48.313	2	4.20E+01	1.81E+02	3.01E+02	2	1	4
129	7.927	48.331	4	6.68E+01	2.74E+02	4.58E+02	3	2	4
193	7.974	48.204	2	5.07E-02	1.78E+00	2.59E+00	1	1	1
194	7.911	48.293	2	4.68E+02	5.70E+02	1.28E+03	6	6	6
210	7.880	48.198	2	2.93E+01	1.64E+02	2.64E+02	2	1	4
221	7.866	48.425	4	2.93E+01	1.77E+02	2.82E+02	2	1	4
222	7.904	48.425	4	9.99E+02	4.22E+03	7.03E+03	6	6	8
223	7.951	48.433	4	6.92E-03	0.00E+00	6.92E-03	1	1	1
225	7.929	48.300	4	4.98E+01	2.24E+02	3.70E+02	2	1	4
258	7.892	48.149	2	2.01E+01	1.28E+02	2.03E+02	2	1	3
259	7.839	48.229	3	6.96E-01	1.03E+01	1.54E+01	1	1	1
293	7.936	48.474	5	1.22E+01	1.25E+02	1.91E+02	2	1	3
294	7.870	48.475	5	1.72E+01	1.78E+02	2.71E+02	2	1	4
295	7.829	48.482	5	1.11E-03	0.00E+00	1.11E-03	1	1	1
296	7.905	48.473	5	9.48E+02	7.77E+03	1.20E+04	6	6	9

**Case 2a: Protected (Eye,
Respiratory Exposure)**

2 rounds at aimpoint (10.60, 42.70)									
40	10.792	42.386	5	1.55E-01	3.29E+01	1.55E-01	1	1	
43	10.740	42.320	1	2.20E+00	1.52E+02	2.20E+00	1	1	
44	10.438	42.496	2	2.24E-05	0.00E+00	2.24E-05	1	1	
71	10.734	42.486	1	8.22E+00	7.65E+02	8.22E+00	2	1	
72	10.680	42.398	1	2.58E-05	1.56E-01	2.58E-05	1	1	
130	10.790	42.307	3	1.23E-01	3.06E+01	1.23E-01	1	1	
131	10.723	42.397	2	4.37E-01	9.53E+01	4.37E-01	1	1	
142	10.598	42.284	2	0.00E+00	1.22E-02	0.00E+00	1	1	
206	10.774	42.454	2	1.13E+00	1.46E+02	1.13E+00	1	1	
211	10.748	42.548	2	1.61E+01	4.00E+03	1.61E+01	2	1	
226	10.758	42.201	4	3.18E-01	4.34E+01	3.18E-01	1	1	
227	10.836	42.132	4	0.00E+00	8.10E-01	0.00E+00	1	1	
228	10.859	42.183	4	0.00E+00	3.67E-02	0.00E+00	1	1	
240	10.491	42.450	5	1.31E+01	7.83E+02	1.31E+01	2	1	
269	10.759	42.060	2	3.37E-02	1.25E+01	3.37E-02	1	1	
281	10.438	42.395	2	6.17E-05	4.84E-01	6.17E-05	1	1	
282	10.719	42.175	2	9.12E-02	2.09E+01	9.12E-02	1	1	
284	10.749	42.595	2	9.75E+00	5.95E+03	9.75E+00	2	1	
322	10.514	42.291	4	1.04E+00	9.85E+01	1.04E+00	1	1	
323	10.517	42.409	3	5.07E+00	2.85E+02	5.07E+00	2	1	
324	10.448	42.294	3	9.30E-05	4.98E+00	9.30E-05	1	1	
325	10.492	42.500	9	1.54E+01	1.62E+03	1.54E+01	2	1	

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

Case 2b: Protected (Skin Exposure)

2 rounds at aimpoint (10.60, 42.70)									
40	10.792	42.386	5	3.21E+00	9.41E+01	1.38E+02			3
43	10.740	42.320	1	6.19E+01	4.36E+02	6.85E+02			5
44	10.438	42.496	2	3.97E-04	0.00E+00	3.97E-04			1
71	10.734	42.486	1	9.37E+01	2.19E+03	3.22E+03			7
72	10.680	42.398	1	9.60E-04	4.45E-01	6.37E-01			1
130	10.790	42.307	3	3.06E+00	8.74E+01	1.28E+02			3
131	10.723	42.397	2	8.99E+00	2.72E+02	3.98E+02			4
142	10.598	42.284	2	5.47E-06	3.50E-02	5.00E-02			1
206	10.774	42.454	2	1.56E+01	4.17E+02	6.11E+02			5
211	10.748	42.548	2	1.65E+02	1.14E+04	1.65E+04			9
226	10.758	42.201	4	4.90E+00	1.24E+02	1.82E+02			3
227	10.836	42.132	4	6.64E-05	2.32E+00	3.31E+00			1
228	10.859	42.183	4	0.00E+00	1.05E-01	1.50E-01			1
240	10.491	42.450	5	1.67E+02	2.24E+03	3.37E+03			7
269	10.759	42.060	2	8.79E-01	3.56E+01	5.17E+01			2
281	10.438	42.395	2	2.70E-03	1.38E+00	1.97E+00			1
282	10.719	42.175	2	1.77E+00	5.98E+01	8.72E+01			2
284	10.749	42.595	2	1.13E+02	1.70E+04	2.44E+04			9
322	10.514	42.291	4	2.88E+01	2.82E+02	4.32E+02			4
323	10.517	42.409	3	7.83E+01	8.15E+02	1.24E+03			6
324	10.448	42.294	3	1.27E-01	1.43E+01	2.06E+01			1
325	10.492	42.500	9	1.65E+02	4.64E+03	6.79E+03			8

Mustard (HD) 250kg Bomb
Moderate Attack
Height of Release: 70m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg/man)	Effective Dose (mg-min/m ³)	Injury Severity Category		
							E	R	S
12 rounds at aimpoint (10.70, 42.80)									
40	10.792	42.386	5	1.69E+02	3.34E+02	6.46E+02	6	5	5
43	10.740	42.320	1	3.03E+02	4.02E+02	8.77E+02	6	6	6
44	10.438	42.496	2	4.53E-02	1.47E+00	2.15E+00	1	1	1
71	10.734	42.486	1	5.75E+02	2.16E+03	3.66E+03	6	6	7
72	10.680	42.398	1	1.29E+02	4.08E+02	7.12E+02	5	4	5
73	10.841	42.495	1	8.63E+02	3.88E+03	6.41E+03	6	6	8
130	10.790	42.307	3	2.91E+01	1.85E+02	2.93E+02	2	1	4
131	10.723	42.397	2	1.04E+02	4.10E+02	6.90E+02	5	4	5
135	10.895	42.320	2	3.11E+01	1.82E+02	2.91E+02	2	1	4
140	11.090	42.435	2	2.69E+01	1.12E+02	1.87E+02	2	1	3
141	10.957	42.331	2	4.25E+02	4.94E+02	1.13E+03	6	6	6
142	10.598	42.284	2	1.66E+01	1.28E+02	1.99E+02	2	1	3
157	11.013	42.282	2	2.25E+01	1.62E+02	2.54E+02	2	1	4
206	10.774	42.454	2	1.78E+02	5.98E+02	1.03E+03	6	5	6
207	10.948	42.402	2	1.26E+03	1.38E+03	3.23E+03	6	7	7
208	11.091	42.478	2	1.84E+01	9.36E+01	1.52E+02	2	1	3
209	10.869	42.349	2	2.26E+02	4.17E+02	8.22E+02	6	5	6
211	10.748	42.548	2	1.39E+03	1.13E+04	1.75E+04	6	7	9
226	10.758	42.201	4	1.77E+01	1.25E+02	1.96E+02	2	1	3
227	10.836	42.132	4	7.99E+00	6.27E+01	9.76E+01	2	1	2
228	10.859	42.183	4	1.36E+01	1.06E+02	1.65E+02	2	1	3
229	10.939	42.475	4	9.07E+02	2.60E+03	4.62E+03	6	6	8
240	10.491	42.450	5	4.99E+02	5.19E+02	1.24E+03	6	6	6
247	10.846	42.387	5	1.00E+03	1.06E+03	2.51E+03	6	6	7
248	10.955	42.100	5	5.90E+00	4.61E+01	7.18E+01	2	1	2
264	10.880	42.213	6	1.45E+01	1.08E+02	1.69E+02	2	1	3
265	11.038	42.174	3	1.20E+01	8.91E+01	1.39E+02	2	1	3
269	10.759	42.060	2	3.67E+00	3.08E+01	4.77E+01	1	1	2
270	11.077	42.122	2	3.88E+00	3.25E+01	5.03E+01	1	1	2
273	10.992	42.130	4	5.82E+00	4.89E+01	7.57E+01	2	1	2
274	10.943	42.205	4	1.83E+01	1.28E+02	2.01E+02	2	1	3
275	10.922	42.146	4	8.00E+00	6.44E+01	1.00E+02	2	1	3
276	11.113	42.169	4	6.73E-01	1.07E+01	1.60E+01	1	1	1
277	10.886	42.648	1	8.32E+02	5.56E+03	8.77E+03	6	6	8

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

278	10.882	42.109	1	5.56E+00	4.44E+01	6.90E+01	2	1	2
279	11.151	42.140	1	0.00E+00	3.40E-01	4.86E-01	1	1	1
280	11.031	42.559	2	4.74E+02	3.76E+03	5.85E+03	6	6	8
281	10.438	42.395	2	5.71E-01	7.88E+00	1.18E+01	1	1	1
282	10.719	42.175	2	9.63E+00	7.74E+01	1.20E+02	2	1	3
284	10.749	42.595	2	2.15E+03	1.91E+04	2.94E+04	6	7	9
321	11.110	42.321	1	6.63E-01	7.09E+00	1.08E+01	1	1	1
322	10.514	42.291	4	2.46E+01	1.67E+02	2.63E+02	2	1	4
323	10.517	42.409	3	1.88E+02	4.30E+02	8.02E+02	6	5	6
324	10.448	42.294	3	1.53E+00	1.75E+01	2.65E+01	1	1	2
325	10.492	42.500	9	9.25E+02	1.01E+03	2.37E+03	6	6	7

**Case 2a: Protected (Eye,
Respiratory Exposure)**

12 rounds at aimpoint (10.65, 42.70)

40	10.792	42.386	5	1.75E+01	1.20E+03	1.75E+01	2	1	
43	10.740	42.320	1	1.62E+00	1.52E+02	1.62E+00	1	1	
44	10.438	42.496	2	1.37E+01	1.04E+03	1.37E+01	2	1	
71	10.734	42.486	1	9.51E+00	7.05E+02	9.51E+00	2	1	
72	10.680	42.398	1	5.85E+00	5.38E+02	5.85E+00	2	1	
73	10.841	42.495	1	1.66E+01	1.28E+03	1.66E+01	2	1	
130	10.790	42.307	3	9.08E+00	3.70E+02	9.08E+00	2	1	
131	10.723	42.397	2	2.81E+00	3.14E+02	2.81E+00	1	1	
135	10.895	42.320	2	1.38E+01	5.37E+02	1.38E+01	2	1	
141	10.957	42.331	2	2.19E+00	1.74E+02	2.19E+00	1	1	
142	10.598	42.284	2	9.12E+00	3.58E+02	9.12E+00	2	1	
157	11.013	42.282	2	4.67E+00	2.18E+02	4.67E+00	1	1	
206	10.774	42.454	2	1.45E+00	1.92E+02	1.45E+00	1	1	
207	10.948	42.402	2	1.29E+01	4.52E+02	1.29E+01	2	1	
209	10.869	42.349	2	1.66E+00	1.80E+02	1.66E+00	1	1	
211	10.748	42.548	2	2.01E+01	3.75E+03	2.01E+01	2	1	
226	10.758	42.201	4	6.44E-01	5.63E+01	6.44E-01	1	1	
227	10.836	42.132	4	5.98E-01	3.86E+01	5.98E-01	1	1	
228	10.859	42.183	4	6.72E-01	5.17E+01	6.72E-01	1	1	
229	10.939	42.475	4	1.43E+01	8.57E+02	1.43E+01	2	1	
240	10.491	42.450	5	1.41E+01	2.75E+03	1.41E+01	2	1	
247	10.846	42.387	5	9.09E+00	3.50E+02	9.09E+00	2	1	
248	10.955	42.100	5	6.29E-01	2.69E+01	6.29E-01	1	1	
264	10.880	42.213	6	8.79E-01	9.81E+01	8.79E-01	1	1	
265	11.038	42.174	3	8.27E-02	2.37E+01	8.27E-02	1	1	
269	10.759	42.060	2	5.38E-01	2.13E+01	5.38E-01	1	1	
270	11.077	42.122	2	0.00E+00	5.90E-01	0.00E+00	1	1	
273	10.992	42.130	4	7.32E-01	5.17E+01	7.32E-01	1	1	
274	10.943	42.205	4	7.35E-01	5.57E+01	7.35E-01	1	1	
275	10.922	42.146	4	7.08E-01	5.32E+01	7.08E-01	1	1	
277	10.886	42.648	1	1.72E-03	9.59E+00	1.72E-03	1	1	
278	10.882	42.109	1	6.86E-01	3.97E+01	6.86E-01	1	1	
280	11.031	42.559	2	1.43E-04	6.90E+00	1.43E-04	1	1	
281	10.438	42.395	2	6.72E+00	2.64E+02	6.72E+00	2	1	
282	10.719	42.175	2	6.31E-01	7.17E+01	6.31E-01	1	1	
284	10.749	42.595	2	1.30E+01	6.36E+03	1.30E+01	2	1	
322	10.514	42.291	4	5.45E+00	2.59E+02	5.45E+00	2	1	
323	10.517	42.409	3	8.77E+00	8.74E+02	8.77E+00	2	1	
324	10.448	42.294	3	1.23E+00	1.05E+02	1.23E+00	1	1	
325	10.492	42.500	9	8.77E+00	4.72E+03	8.77E+00	2	1	

**Case 2b: Protected (Skin
Exposure)**

12 rounds at aimpoint (10.65, 42.70)

40	10.792	42.386	5	1.84E+02	3.44E+03	5.10E+03			8
43	10.740	42.320	1	4.76E+01	4.33E+02	6.66E+02			5
44	10.438	42.496	2	1.39E+02	2.99E+03	4.41E+03			8
71	10.734	42.486	1	9.87E+01	2.02E+03	2.98E+03			7
72	10.680	42.398	1	6.46E+01	1.54E+03	2.26E+03			7
73	10.841	42.495	1	1.70E+02	3.67E+03	5.41E+03			8
130	10.790	42.307	3	1.33E+02	1.06E+03	1.65E+03			7
131	10.723	42.397	2	3.51E+01	8.97E+02	1.32E+03			6
135	10.895	42.320	2	1.88E+02	1.54E+03	2.39E+03			7
141	10.957	42.331	2	6.82E+01	4.97E+02	7.78E+02			6
142	10.598	42.284	2	1.62E+02	1.02E+03	1.62E+03			7
157	11.013	42.282	2	8.86E+01	6.23E+02	9.79E+02			6
206	10.774	42.454	2	1.86E+01	5.50E+02	8.04E+02			6
207	10.948	42.402	2	1.90E+02	1.29E+03	2.03E+03			7

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

209	10.869	42.349	2	4.17E+01	5.14E+02	7.76E+02			6
211	10.748	42.548	2	2.16E+02	1.07E+04	1.55E+04			9
226	10.758	42.201	4	7.10E+00	1.61E+02	2.37E+02			3
227	10.836	42.132	4	5.32E+00	1.10E+02	1.62E+02			3
228	10.859	42.183	4	6.56E+00	1.48E+02	2.18E+02			3
229	10.939	42.475	4	1.51E+02	2.45E+03	3.65E+03			7
240	10.491	42.450	5	1.53E+02	7.85E+03	1.14E+04			8
247	10.846	42.387	5	1.54E+02	1.00E+03	1.58E+03			7
248	10.955	42.100	5	4.00E+00	7.70E+01	1.14E+02			3
264	10.880	42.213	6	2.05E+01	2.81E+02	4.22E+02			4
265	11.038	42.174	3	1.77E+00	6.78E+01	9.86E+01			2
269	10.759	42.060	2	3.24E+00	6.08E+01	9.01E+01			2
270	11.077	42.122	2	1.06E-04	1.69E+00	2.41E+00			1
273	10.992	42.130	4	7.03E+00	1.48E+02	2.18E+02			3
274	10.943	42.205	4	7.54E+00	1.59E+02	2.35E+02			3
275	10.922	42.146	4	7.24E+00	1.52E+02	2.24E+02			3
277	10.886	42.648	1	2.44E-02	2.74E+01	3.92E+01			2
278	10.882	42.109	1	5.53E+00	1.13E+02	1.67E+02			3
280	11.031	42.559	2	2.51E-03	1.97E+01	2.81E+01			2
281	10.438	42.395	2	1.06E+02	7.56E+02	1.19E+03			6
282	10.719	42.175	2	1.06E+01	2.05E+02	3.03E+02			4
284	10.749	42.595	2	1.50E+02	1.82E+04	2.62E+04			9
322	10.514	42.291	4	9.04E+01	7.40E+02	1.15E+03			6
323	10.517	42.409	3	9.28E+01	2.50E+03	3.66E+03			7
324	10.448	42.294	3	3.29E+01	3.01E+02	4.63E+02			4
325	10.492	42.500	9	1.01E+02	1.35E+04	1.94E+04			9

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (10.70, 43.10)									
40	10.792	42.386	5	1.01E+02	1.91E+02	3.74E+02	5	4	4
43	10.740	42.320	1	1.28E+02	1.71E+02	3.72E+02	5	4	4
44	10.438	42.496	2	4.90E+00	1.85E+01	3.13E+01	1	1	2
71	10.734	42.486	1	6.94E+02	7.92E+02	1.83E+03	6	6	7
72	10.680	42.398	1	1.80E+02	2.55E+02	5.44E+02	6	5	5
73	10.841	42.495	1	1.10E+03	1.11E+03	2.69E+03	6	6	7
130	10.790	42.307	3	2.60E+01	1.09E+02	1.82E+02	2	1	3
131	10.723	42.397	2	1.95E+02	2.64E+02	5.72E+02	6	5	5
135	10.895	42.320	2	3.08E+01	1.13E+02	1.92E+02	2	1	3
140	11.090	42.435	2	6.20E+01	1.11E+02	2.21E+02	3	2	3
141	10.957	42.331	2	2.04E+02	1.97E+02	4.85E+02	6	5	4
142	10.598	42.284	2	1.57E+01	8.57E+01	1.38E+02	2	1	3
157	11.013	42.282	2	1.90E+01	9.03E+01	1.48E+02	2	1	3
182	10.559	43.004	4	1.37E+02	6.42E+01	2.29E+02	5	4	3
206	10.774	42.454	2	2.69E+02	4.31E+02	8.85E+02	6	6	6
207	10.948	42.402	2	7.73E+02	4.37E+02	1.40E+03	6	6	6
208	11.091	42.478	2	4.23E+01	1.27E+02	2.24E+02	2	1	3
209	10.869	42.349	2	1.66E+02	1.95E+02	4.45E+02	6	5	4
211	10.748	42.548	2	2.02E+03	2.82E+03	6.05E+03	6	7	8
226	10.758	42.201	4	1.17E+01	5.04E+01	8.37E+01	2	1	2
227	10.836	42.132	4	7.06E+00	2.66E+01	4.51E+01	2	1	2
228	10.859	42.183	4	1.02E+01	4.33E+01	7.21E+01	2	1	2
229	10.939	42.475	4	8.61E+02	8.53E+02	2.08E+03	6	6	7
240	10.491	42.450	5	2.63E+02	1.92E+02	5.37E+02	6	6	5
247	10.846	42.387	5	6.11E+02	3.63E+02	1.13E+03	6	6	6
248	10.955	42.100	5	5.80E+00	1.96E+01	3.38E+01	2	1	2
264	10.880	42.213	6	1.23E+01	5.29E+01	8.79E+01	2	1	2
265	11.038	42.174	3	9.87E+00	3.51E+01	6.00E+01	2	1	2
269	10.759	42.060	2	4.18E+00	1.37E+01	2.38E+01	1	1	1
270	11.077	42.122	2	4.04E+00	1.49E+01	2.53E+01	1	1	2
273	10.992	42.130	4	6.17E+00	2.41E+01	4.06E+01	2	1	2

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

274	10.943	42.205	4	1.22E+01	5.37E+01	8.89E+01	2	1	2
275	10.922	42.146	4	8.49E+00	2.89E+01	4.98E+01	2	1	2
276	11.113	42.169	4	1.16E+00	8.04E+00	1.26E+01	1	1	1
277	10.886	42.648	1	1.10E+03	1.79E+03	3.66E+03	6	6	7
278	10.882	42.109	1	5.57E+00	2.08E+01	3.53E+01	2	1	2
279	11.151	42.140	1	1.23E-04	1.07E+00	1.53E+00	1	1	1
280	11.031	42.559	2	7.33E+02	1.40E+03	2.73E+03	6	6	7
281	10.438	42.395	2	2.06E+00	1.74E+01	2.69E+01	1	1	2
282	10.719	42.175	2	8.93E+00	3.77E+01	6.28E+01	2	1	2
284	10.749	42.595	2	1.86E+03	5.80E+03	1.01E+04	6	7	8
321	11.110	42.321	1	3.15E+00	1.84E+01	2.94E+01	1	1	2
322	10.514	42.291	4	1.82E+01	8.60E+01	1.41E+02	2	1	3
323	10.517	42.409	3	1.79E+02	2.55E+02	5.43E+02	6	5	5
324	10.448	42.294	3	1.96E+00	1.40E+01	2.20E+01	1	1	1
325	10.492	42.500	9	5.76E+02	3.28E+02	1.04E+03	6	6	6

**Case 2a: Protected (Eye,
Respiratory Exposure)**

24 rounds at aimpoint (10.65, 42.90)									
40	10.792	42.386	5	1.81E+01	1.32E+03	1.81E+01	2	1	
43	10.740	42.320	1	3.18E+00	1.94E+02	3.18E+00	1	1	
44	10.438	42.496	2	1.47E+01	1.10E+03	1.47E+01	2	1	
71	10.734	42.486	1	1.06E+01	8.35E+02	1.06E+01	2	1	
72	10.680	42.398	1	6.85E+00	6.27E+02	6.85E+00	2	1	
73	10.841	42.495	1	1.82E+01	1.39E+03	1.82E+01	2	1	
130	10.790	42.307	3	1.00E+01	4.20E+02	1.00E+01	2	1	
131	10.723	42.397	2	3.90E+00	4.06E+02	3.90E+00	1	1	
135	10.895	42.320	2	1.50E+01	6.15E+02	1.50E+01	2	1	
140	11.090	42.435	2	0.00E+00	1.25E-02	0.00E+00	1	1	
141	10.957	42.331	2	4.05E+00	2.12E+02	4.05E+00	1	1	
142	10.598	42.284	2	1.06E+01	3.99E+02	1.06E+01	2	1	
157	11.013	42.282	2	5.82E+00	2.54E+02	5.82E+00	2	1	
206	10.774	42.454	2	2.42E+00	3.16E+02	2.42E+00	1	1	
207	10.948	42.402	2	1.48E+01	4.94E+02	1.48E+01	2	1	
209	10.869	42.349	2	2.95E+00	2.29E+02	2.95E+00	1	1	
211	10.748	42.548	2	2.29E+01	3.95E+03	2.29E+01	2	1	
226	10.758	42.201	4	2.15E+00	7.04E+01	2.15E+00	1	1	
227	10.836	42.132	4	2.11E+00	4.60E+01	2.11E+00	1	1	
228	10.859	42.183	4	2.10E+00	6.29E+01	2.10E+00	1	1	
229	10.939	42.475	4	1.56E+01	1.01E+03	1.56E+01	2	1	
240	10.491	42.450	5	1.60E+01	2.88E+03	1.60E+01	2	1	
247	10.846	42.387	5	1.12E+01	4.03E+02	1.12E+01	2	1	
248	10.955	42.100	5	2.08E+00	3.18E+01	2.08E+00	1	1	
264	10.880	42.213	6	2.48E+00	1.17E+02	2.48E+00	1	1	
265	11.038	42.174	3	5.27E-01	2.94E+01	5.27E-01	1	1	
269	10.759	42.060	2	1.89E+00	2.49E+01	1.89E+00	1	1	
270	11.077	42.122	2	0.00E+00	1.50E+00	0.00E+00	1	1	
273	10.992	42.130	4	2.18E+00	5.99E+01	2.18E+00	1	1	
274	10.943	42.205	4	2.03E+00	7.06E+01	2.03E+00	1	1	
275	10.922	42.146	4	2.18E+00	6.08E+01	2.18E+00	1	1	
276	11.113	42.169	4	0.00E+00	1.02E-01	0.00E+00	1	1	
277	10.886	42.648	1	1.00E+01	1.91E+03	1.00E+01	2	1	
278	10.882	42.109	1	2.24E+00	4.71E+01	2.24E+00	1	1	
280	11.031	42.559	2	3.07E-01	7.68E+01	3.07E-01	1	1	
281	10.438	42.395	2	7.81E+00	2.90E+02	7.81E+00	2	1	
282	10.719	42.175	2	2.38E+00	8.52E+01	2.38E+00	1	1	
284	10.749	42.595	2	2.46E+01	6.76E+03	2.46E+01	2	1	
321	11.110	42.321	1	0.00E+00	1.64E-02	0.00E+00	1	1	
322	10.514	42.291	4	6.41E+00	2.96E+02	6.41E+00	2	1	
323	10.517	42.409	3	9.66E+00	9.87E+02	9.66E+00	2	1	
324	10.448	42.294	3	2.34E+00	1.19E+02	2.34E+00	1	1	
325	10.492	42.500	9	1.79E+01	5.06E+03	1.79E+01	2	1	

**Case 2b: Protected (Skin
Exposure)**

24 rounds at aimpoint (10.65, 42.90)									
40	10.792	42.386	5	2.38E+02	3.78E+03	5.64E+03			8
43	10.740	42.320	1	7.55E+01	5.54E+02	8.67E+02			6
44	10.438	42.496	2	1.84E+02	3.14E+03	4.67E+03			8
71	10.734	42.486	1	1.39E+02	2.39E+03	3.55E+03			7
72	10.680	42.398	1	9.51E+01	1.79E+03	2.65E+03			7
73	10.841	42.495	1	2.31E+02	3.98E+03	5.92E+03			8
130	10.790	42.307	3	1.58E+02	1.20E+03	1.87E+03			7

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

131	10.723	42.397	2	5.77E+01	1.16E+03	1.71E+03			7
135	10.895	42.320	2	2.15E+02	1.76E+03	2.73E+03			7
140	11.090	42.435	2	5.24E-05	3.57E-02	5.11E-02			1
141	10.957	42.331	2	9.77E+01	6.07E+02	9.65E+02			6
142	10.598	42.284	2	1.90E+02	1.14E+03	1.82E+03			7
157	11.013	42.282	2	1.07E+02	7.25E+02	1.14E+03			6
206	10.774	42.454	2	4.11E+01	9.04E+02	1.33E+03			6
207	10.948	42.402	2	2.21E+02	1.41E+03	2.24E+03			7
208	11.091	42.478	2	1.84E-05	0.00E+00	1.84E-05			1
209	10.869	42.349	2	6.05E+01	6.55E+02	9.96E+02			6
211	10.748	42.548	2	3.34E+02	1.13E+04	1.65E+04			9
226	10.758	42.201	4	1.68E+01	2.01E+02	3.04E+02			4
227	10.836	42.132	4	1.14E+01	1.32E+02	2.00E+02			3
228	10.859	42.183	4	1.53E+01	1.80E+02	2.72E+02			4
229	10.939	42.475	4	1.95E+02	2.89E+03	4.32E+03			8
240	10.491	42.450	5	2.42E+02	8.24E+03	1.20E+04			9
247	10.846	42.387	5	1.83E+02	1.15E+03	1.83E+03			7
248	10.955	42.100	5	9.38E+00	9.08E+01	1.39E+02			3
264	10.880	42.213	6	3.94E+01	3.34E+02	5.17E+02			5
265	11.038	42.174	3	5.60E+00	8.40E+01	1.26E+02			3
269	10.759	42.060	2	7.95E+00	7.11E+01	1.10E+02			3
270	11.077	42.122	2	1.51E-04	4.28E+00	6.11E+00			1
273	10.992	42.130	4	1.92E+01	1.71E+02	2.63E+02			4
274	10.943	42.205	4	1.75E+01	2.02E+02	3.06E+02			4
275	10.922	42.146	4	1.50E+01	1.74E+02	2.64E+02			4
276	11.113	42.169	4	0.00E+00	2.92E-01	4.17E-01			1
277	10.886	42.648	1	1.18E+02	5.46E+03	7.92E+03			8
278	10.882	42.109	1	1.29E+01	1.35E+02	2.06E+02			3
280	11.031	42.559	2	4.88E+00	2.20E+02	3.19E+02			4
281	10.438	42.395	2	1.22E+02	8.28E+02	1.30E+03			6
282	10.719	42.175	2	2.68E+01	2.44E+02	3.75E+02			4
284	10.749	42.595	2	3.25E+02	1.93E+04	2.79E+04			9
321	11.110	42.321	1	0.00E+00	4.68E-02	6.69E-02			1
322	10.514	42.291	4	1.11E+02	8.47E+02	1.32E+03			6
323	10.517	42.409	3	1.33E+02	2.82E+03	4.16E+03			8
324	10.448	42.294	3	6.05E+01	3.41E+02	5.48E+02			5
325	10.492	42.500	9	2.37E+02	1.45E+04	2.10E+04			9

Mustard (HD) 250kg TBM
Light Attack
Height of Release: 500m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (10.90, 42.85)									
40	10.792	42.386	5	0.00E+00	1.15E-01	1.64E-01	1	1	1
43	10.740	42.320	1	0.00E+00	3.65E-02	5.21E-02	1	1	1
44	10.438	42.496	2	1.46E+00	2.32E+00	4.77E+00	1	1	1
71	10.734	42.486	1	2.52E+00	3.60E+00	7.66E+00	1	1	1
72	10.680	42.398	1	1.67E+00	1.25E+00	3.46E+00	1	1	1
73	10.841	42.495	1	9.19E-05	2.70E-01	3.86E-01	1	1	1
131	10.723	42.397	2	8.45E-01	7.20E-01	1.87E+00	1	1	1
142	10.598	42.284	2	0.00E+00	5.39E-02	7.70E-02	1	1	1
182	10.559	43.004	4	2.91E+02	4.93E+02	9.95E+02	6	6	6
206	10.774	42.454	2	9.64E-01	8.95E-01	2.24E+00	1	1	1
211	10.748	42.548	2	3.41E+00	6.77E+00	1.31E+01	1	1	1
240	10.491	42.450	5	2.22E+00	2.61E+00	5.95E+00	1	1	1
281	10.438	42.395	2	2.67E-04	3.45E-01	4.93E-01	1	1	1
284	10.749	42.595	2	4.48E+00	1.11E+01	2.03E+01	1	1	1
323	10.517	42.409	3	1.60E+00	1.57E+00	3.84E+00	1	1	1
325	10.492	42.500	9	3.77E+00	6.62E+00	1.32E+01	1	1	1
1 round at aimpoint (10.50, 42.70)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	

Case 2a: Protected (Eye, Respiratory Exposure)
Case 2b: Protected (Skin Exposure)

1 round at aimpoint (10.50, 42.70)									
44	10.438	42.496	2	0.00E+00	1.62E+01	2.31E+01			1

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

142	10.598	42.284	2	0.00E+00	5.60E-03	8.00E-03			1
240	10.491	42.450	5	1.10E+00	1.65E+03	2.36E+03			7
281	10.438	42.395	2	0.00E+00	4.03E+01	5.76E+01			2
322	10.514	42.291	4	0.00E+00	6.50E+00	9.29E+00			1
323	10.517	42.409	3	1.96E-01	8.00E+02	1.14E+03			6
324	10.448	42.294	3	0.00E+00	1.37E+00	1.96E+00			1
325	10.492	42.500	9	1.99E+00	2.16E+03	3.09E+03			7

Mustard (HD) 500kg TBM
Moderate Attack
Height of Release: 800m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (10.60, 43.25)									
40	10.792	42.386	5	3.39E+01	7.70E+01	1.44E+02	2	1	3
43	10.740	42.320	1	6.55E+00	2.05E+01	3.58E+01	2	1	2
44	10.438	42.496	2	3.08E+01	8.42E+01	1.51E+02	2	1	3
71	10.734	42.486	1	1.87E-01	1.69E+00	2.60E+00	1	1	1
72	10.680	42.398	1	2.40E-02	7.29E-01	1.07E+00	1	1	1
73	10.841	42.495	1	1.16E+02	2.61E+02	4.89E+02	5	4	4
130	10.790	42.307	3	3.76E+01	9.83E+01	1.78E+02	2	1	3
131	10.723	42.397	2	1.87E+00	6.02E+00	1.05E+01	1	1	1
135	10.895	42.320	2	2.97E+02	6.60E+02	1.24E+03	6	6	6
140	11.090	42.435	2	9.81E+00	2.48E+01	4.52E+01	2	1	2
141	10.957	42.331	2	3.28E+02	7.17E+02	1.35E+03	6	6	6
142	10.598	42.284	2	6.53E-02	9.75E-01	1.46E+00	1	1	1
157	11.013	42.282	2	1.33E+02	3.07E+02	5.72E+02	5	4	5
206	10.774	42.454	2	1.23E+01	2.79E+01	5.22E+01	2	1	2
207	10.948	42.402	2	4.98E+02	1.05E+03	2.00E+03	6	6	7
208	11.091	42.478	2	5.12E+00	1.38E+01	2.48E+01	2	1	1
209	10.869	42.349	2	2.45E+02	5.35E+02	1.01E+03	6	5	6
211	10.748	42.548	2	1.31E-03	1.80E-01	2.58E-01	1	1	1
226	10.758	42.201	4	1.70E+01	4.89E+01	8.69E+01	2	1	2
227	10.836	42.132	4	6.13E+01	1.49E+02	2.74E+02	3	2	4
228	10.859	42.183	4	1.02E+02	2.46E+02	4.53E+02	5	4	4
229	10.939	42.475	4	6.01E+02	1.35E+03	2.53E+03	6	6	7
240	10.491	42.450	5	1.01E+01	2.79E+01	5.00E+01	2	1	2
247	10.846	42.387	5	1.68E+02	3.69E+02	6.95E+02	6	5	5
248	10.955	42.100	5	7.61E+01	1.95E+02	3.55E+02	4	3	4
264	10.880	42.213	6	1.42E+02	3.45E+02	6.35E+02	5	4	5
265	11.038	42.174	3	5.41E+01	1.43E+02	2.58E+02	3	2	4
269	10.759	42.060	2	1.28E+01	3.30E+01	5.99E+01	2	1	2
270	11.077	42.122	2	2.37E+01	6.43E+01	1.16E+02	2	1	3
273	10.992	42.130	4	7.57E+01	1.92E+02	3.50E+02	4	3	4
274	10.943	42.205	4	1.66E+02	3.93E+02	7.27E+02	6	5	5
275	10.922	42.146	4	1.14E+02	2.71E+02	5.01E+02	5	4	5
276	11.113	42.169	4	1.18E+01	3.46E+01	6.12E+01	2	1	2
277	10.886	42.648	1	4.12E+02	8.88E+02	1.68E+03	6	6	7
278	10.882	42.109	1	7.57E+01	1.88E+02	3.44E+02	4	3	4
279	11.151	42.140	1	4.28E+00	1.26E+01	2.23E+01	1	1	1
280	11.031	42.559	2	5.29E+01	1.05E+02	2.03E+02	3	2	3
281	10.438	42.395	2	1.84E+01	4.64E+01	8.47E+01	2	1	2
282	10.719	42.175	2	6.81E+00	2.03E+01	3.58E+01	2	1	2
284	10.749	42.595	2	1.25E-04	1.32E-02	1.90E-02	1	1	1
321	11.110	42.321	1	8.46E+00	2.54E+01	4.47E+01	2	1	2
322	10.514	42.291	4	3.43E+00	6.19E+00	1.23E+01	1	1	1
323	10.517	42.409	3	5.92E+00	1.43E+01	2.63E+01	2	1	2
324	10.448	42.294	3	7.92E+00	1.63E+01	3.12E+01	2	1	2
325	10.492	42.500	9	1.13E+01	3.20E+01	5.70E+01	2	1	2

**Case 2a: Zero to One Minute
(protected)**

**Case 2b: Protected (Skin
Exposure)**

Table C5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Offense

178	5.792	49.720	4	0.00E+00	1.59E+02	2.27E+02			3
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Mustard (HD) 500kg TBM
Heavy Attack
Height of Release: 800m

**Case 2a: Protected (Eye,
Respiratory Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg- min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
4 rounds at aimpoint (10.35, 47.55)									
48	10.165	46.551	1	7.82E+00	1.38E+01	2.75E+01	2	1	2
102	10.494	46.773	3	1.62E+02	3.84E+02	7.11E+02	6	5	5
103	9.999	46.817	1	8.79E+01	2.25E+02	4.09E+02	4	3	4
104	10.012	47.018	4	2.62E+02	6.32E+02	1.16E+03	6	6	6
105	10.124	47.005	4	1.93E+02	4.65E+02	8.57E+02	6	5	6
106	10.228	47.008	2	1.32E+01	3.83E+01	6.79E+01	2	1	2
107	10.338	46.997	4	1.44E-02	5.04E-01	7.34E-01	1	1	1
108	10.752	46.815	4	1.65E+02	3.48E+02	6.62E+02	6	5	5
109	10.818	46.635	4	3.95E+01	1.00E+02	1.82E+02	2	1	3
110	10.859	46.478	4	1.51E+01	4.08E+01	7.34E+01	2	1	2
111	10.656	46.929	2	7.60E+02	1.53E+03	2.95E+03	6	6	7
112	10.708	46.424	4	1.34E+02	3.39E+02	6.18E+02	5	4	5
113	10.612	46.387	4	1.60E+02	3.72E+02	6.91E+02	6	5	5
114	10.539	46.317	2	2.13E+02	4.65E+02	8.77E+02	6	5	6
115	10.400	46.322	4	2.27E+02	5.61E+02	1.03E+03	6	5	6
151	10.364	46.506	2	1.19E+02	2.76E+02	5.13E+02	5	4	5
152	10.429	46.678	6	6.50E+02	1.57E+03	2.89E+03	6	6	7
153	10.617	46.667	4	7.20E+02	1.41E+03	2.73E+03	6	6	7
155	10.362	46.610	4	7.74E+01	1.11E+02	2.36E+02	4	3	3
164	10.250	46.682	3	6.65E+00	1.57E+01	2.91E+01	2	1	2
174	10.064	46.471	4	5.79E+00	7.35E+00	1.63E+01	2	1	1
175	9.819	46.598	4	2.04E+00	3.83E+00	7.51E+00	1	1	1
176	10.057	46.658	4	3.20E+01	7.73E+01	1.42E+02	2	1	3
177	9.973	46.643	4	2.03E+01	4.73E+01	8.79E+01	2	1	2
195	10.224	46.931	2	1.87E+01	5.32E+01	9.47E+01	2	1	2
196	10.654	46.844	2	1.06E+03	1.92E+03	3.80E+03	6	6	7
197	10.503	46.322	2	3.14E+02	6.82E+02	1.29E+03	6	6	6
198	9.994	46.745	2	5.34E+01	1.33E+02	2.43E+02	3	2	3
199	10.245	46.833	2	1.07E+01	3.06E+01	5.44E+01	2	1	2
235	10.014	46.937	5	1.93E+02	4.61E+02	8.52E+02	6	5	6
239	10.579	46.422	5	2.00E+02	4.91E+02	9.01E+02	6	5	6
241	10.706	46.484	5	2.00E+02	4.80E+02	8.86E+02	6	5	6
242	10.798	46.470	5	5.18E+01	1.38E+02	2.49E+02	3	2	3
243	10.126	46.910	5	1.30E+02	3.17E+02	5.83E+02	5	4	5
244	10.336	46.922	5	4.84E-01	1.77E+00	3.01E+00	1	1	1
245	10.750	46.730	5	2.33E+02	4.85E+02	9.26E+02	6	5	6
246	10.818	46.559	5	4.46E+01	1.12E+02	2.05E+02	2	1	3
249	10.362	46.339	5	1.21E+02	3.08E+02	5.61E+02	5	4	5
285	9.931	47.046	2	4.60E+01	1.29E+02	2.30E+02	2	1	3
309	10.450	46.852	4	9.44E+01	4.61E+02	7.53E+02	4	3	6

**Case 2a: Zero to One Minute
(protected)**
**Case 2b: Protected (Skin
Exposure)**

4 rounds at aimpoint (11.25, 42.25)									
228	10.859	42.183	4	0.00E+00	7.63E-02	1.09E-01			1
248	10.955	42.100	5	9.37E-01	1.44E+03	2.06E+03			7
265	11.038	42.174	3	0.00E+00	1.67E+00	2.39E+00			1
273	10.992	42.130	4	1.33E-01	2.56E+02	3.66E+02			4
274	10.943	42.205	4	2.31E-01	4.88E+02	6.97E+02			5
275	10.922	42.146	4	3.15E-01	6.26E+02	8.95E+02			6
278	10.882	42.109	1	0.00E+00	2.68E+00	3.83E+00			1

APPENDIX D

HEAVY BRIGADE, FORWARD MANEUVER, DEFENSE

Appendix D: Heavy Brigade, Forward Maneuver, Defense

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Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew (foxholes in parentheses) [dismounted in brackets]	Location				
Mech Inf Bn 1	HHC		Bn HQ Sec	Tac CP Element	1 M2	116	5	Tac CP				
				Main CP Element	2 HMMWV	32	2	Main CP				
						33	1	Main CP				
			S-1 Sec		1 HMMWV	40	5	Cbt Train				
			S-2 Sec	Main CP Element	1 M577	125	4	Tac CP				
			S-3 Sec	Tac CP Element	1 M2	117	3	Tac CP				
					1 M113	158	4	Main CP				
				Main CP Element	1 M577	124	6	Main CP				
					3 HMMWV	34	2	Main CP				
						35	2	Main CP				
						41	2	Main CP				
			FSE Sec		1 HMMWV	66	2	Main CP				
					1 Colt	185	2	Main CP				
			Tac CP Sec	Main CP Element	1 HMMWV	36	1	Main CP				
			S-4 Sec	Cbt Trns CP Element	1 M577	131	2	Cbt Train				
					1 HMMWV	38	2	Cbt Train				
			Co HQ	Main CP Element	1 HMMWV	39	2	Main CP				
			HHC	Bn Commo Plt		Main CP Element	2 HMMWV	42	2	Main CP		
								37	2	Main CP		
						Cbt Trns CP Element	1 M577	130	3	Cbt Train		
							1 HMMWV	43	1	Cbt Train		
	3 CYCLE	71					1	Cbt Train				
		72					1	Cbt Train				
		73					1	Cbt Train				
	HHC	Bn Scout Plt					HQ Sec		2 M3	118	5	Fwd
										119	5	Fwd
			Scout Sec		4 M3	120	5		Fwd			
						121	5		Fwd			
						122	5		Fwd			
		123			5	Fwd						
	HHC	Hvy Mort Plt	Mort Plt HQ		2 HMMWV	30	2		Bn rear			
						31	1		Bn rear			
			Mort Sec HQ		2 M577	126	3		Bn rear			
						127	3		Bn rear			

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location		
Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ		6 4.2 MTR	301	4	Bn rear		
						302	4	Bn rear		
						303	4	Bn rear		
						304	4	Bn rear		
						305	4	Bn rear		
						306	4	Bn rear		
			Bn Med Plt	Plt HQ		1 HMMWV	44	2	Cbt Train	
				Aid Station		2 Trucks (2 in 1 icon)	281	2	Cbt Train	
						2 M577-AMB	322	4	Cbt Train	
							323	3	Cbt Train	
		Evac Sec		1 M577-AMB	324	3	Cbt Train			
				7 M113-AMB (7 in 1 icon)	325	14	Cbt Train			
		HHC	Bn Spt Plt	Class III & V Team	4 HEMMT C (4 in 1 icon)	319	8	Cbt Train		
					4 HEMMT P (4 in 1 icon)	320	4	Cbt Train		
		HHC	Bn Maint Plt	Plt HQ		2 HMMWV	45	2	Cbt Train	
							46	0	Cbt Train	
					Admin Sec		4 Truck	277	1	Cbt Train
								278	1	Cbt Train
								279	1	Cbt Train
								280	2	Cbt Train
			Spt Sec		1 Truck	263	2	Cbt Train		
					3 M88A1	140	2	Cbt Train		
						141	2	Cbt Train		
						135	2	Cbt Train		
						1 HEMMT W	321	1	Cbt Train	
	Maint/SVC Sec			1 Truck	268	5	Cbt Train			
				1 HMMWV	47	2	Cbt Train			
				1 M113	157	2	Cbt Train			
				5 Truck	265	3	Cbt Train			
					267	4	Cbt Train			
					266	5	Cbt Train			
				264	6	Cbt Train				
				269	2	Cbt Train				
			4 M88A1	136	3	Cbt Train				
				137	3	Co Train				
				138	3	Co Train				
				139	3	Co Train				
		4 M113	153	4	Co Train					
			154	4	Co Train					
			155	4	Co Train					
			156	4	Co Train					
			8 Trucks (2 in 1 icon)	273	4	Co Train				
				274	4	Cbt Train				

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	
Mech Inf Bn 1	HHC					275	4	Cbt Train	
						276	4	Cbt Train	
					1M113	152	6	Co Train	
					1 Truck	270	2	Cbt Train	
Mech Inf Bn 1	Rifle Co 1		HQ		2 M2	102	3	reserve	
						103	3	reserve	
						1M113	151	2	Co Train
						2HMMWV	48	1	Co Train
						49	2	Co Train	
	Rifle Co 1	Rifle Plt 1			4 M2	104(361)	4(5)	reserve	
						105(362)	4(5)	reserve	
						107(364)	4(5)	reserve	
						108(360)	4(5)	reserve	
	Rifle Co 1	Rifle Plt 2			4 M2	109(359)	4(5)	reserve	
						110(363)	4(5)	reserve	
						112(357)	4(5)	reserve	
						113(355)	4(5)	reserve	
	Rifle Co 1	Rifle Plt 3			4 M2	115(358)	4(5)	reserve	
						106	4	reserve	
						111	4	reserve	
						114	4	reserve	
Mech Inf Bn 1	Rifle Co 2		HQ		2 M2	88	3	line	
						89	3	line	
						1 M113	160	2	Co Train
						2 HMMWV	19	1	Co Train
						20	2	Co Train	
	Rifle Co 2	Rifle Plt 1			4 M2	76(353)	4(5)	line	
						77(354)	4(5)	line	
						79(356)	4(5)	line	
						80(347)	4(5)	line	
	Rifle Co 2	Rifle Plt 2			4 M2	81(348)	4(5)	line	
						83(349)	4(5)	line	
						84(350)	4(5)	line	
						85(351)	4(5)	line	
	Rifle Co 2	Rifle Plt 3			4 M2	87(352)	4(5)	line	
						78	4	line	
						82	4	line	
						86	4	line	
Mech Inf Bn 1			HQ		2 M2	74	3	line	
						75	3	line	
						1 M113	159	2	Co Train
						2 HMMWV	21	1	Co Train

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon # 22	Crew 2	Location Co Train
Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1			4 M2	101(346)	4(5)	line
						99(344)	4(5)	line
						98(345)	4(5)	line
						90(369)	4(5)	line
	Rifle Co 3	Rifle Plt 2			4 M2	91(370)	4(5)	line
						93(368)	4(5)	line
						94(367)	4(5)	line
						95(366)	4(5)	line
	Rifle Co 3	Rifle Plt 3			4 M2	97(365)	4(5)	line
						100	4	line
						92	4	line
						96	4	line
Mech Inf Bn 1	AA Co		HQ		1 M113	165	4	line
					1 HMMWV	55	2	Co Train
						56	2	Co Train
	AA Co	AA Plt			3 M113	162	3	line
						163	3	line
						164	3	line
					12 ITV-TOW	168	4	line
						169	4	line
						170	4	line
						171	4	line
						172	4	line
						173	4	line
						174	4	line
						175	4	line
						176	4	line
						177	4	line
						178	4	line
						179	4	line
						ATTACHMENTS/OPCON/ DIRECT SUPPORT UNITS IN TF AREA		
	Tank Co 1		HQ Sec		2 M1/A1	1	4	line
						2	4	line
					2 HMMWV	17	2	Co Train
						18	2	Co Train
					1 Truck	282	2	Bn Train
Tank Co 1	Tank Plt				12 M1/A1	3	4	line
						4	4	line
						5	4	line
						6	4	line

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						7	4	line
	Tank Co 1					8	4	line
	Tank Co 1	Tank Plt				9	4	line
						10	4	line
						11	4	line
						12	4	line
						13	4	line
						14	4	line
	Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ		1 M113	142	2	1 TF HHC Area
					1 HMMWV	16	2	1 TF HHC Area
					3 Vulcan	180	4	1 TFA
						181	4	1 TFA
						182	4	1 TFA
	Air Def Arty Batt(-)	Missile Plt(-)	Missile Sec		1 HMMWV	15	3	1 TF HHC Area
					5 HMMWV armed w/Stinger	285	2	1 TFA Co
						286	2	1 TF HHC Area
						287	2	1 TFA Co
						290	2	1 TFA Co
						291	2	1 TFA Co
	Eng Co 1		Co HQ		1 M113	149	3	1 TFA
					2 Truck	271	3	1 TFA
						272	3	1 TFA
					1 HMMWV	51	2	1 TFA
	Eng Co 1	Eng Plt 1	Plt HQ 1		2 M113	161	2	1 TFA
						143	2	1 TFA
		Eng Plt 1	Plt HQ 2		2 HMMWV	53	2	1 TFA
						54	2	1 TFA
	Eng Co 1	Eng Plt 2			6 M113	144	8	1 TFA
						145	8	1 TFA
						146	8	1 TFA
						150	8	1 TFA
						166	8	1 TFA
						147	8	1 TFA
	Eng Co 1	Asl & Obs Plt	Plt HQ		2 HMMWV	50	2	Fwd
						52	2	1 TFA
			Assault Sec 1		2 AVLB (2 in 1 icon)	253	4	Fwd
						254	4	Fwd
			Assault Sec 2		2 CEV (2 in 1 icon)	190	8	Fwd
			ObsTacle Sec		7 ACE (7 in 1 icon)	255	7	1 TFA

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Fld Arty Bn	HHB		Commd Sec		2 HMMWV	64	5	Arty Bn CP
	HHB		Commd Sec			62	6	Arty Bn CP
			Batt HQ		1 HMMWV	59	3	Arty Bn CP
			Ops Sec		1 M577	134	4	Arty Bn CP
					1 HMMWV	68	4	Arty Bn CP
			Fire Dir Sec		1 M577	133	5	Arty Bn CP
					1 Truck	283	4	Arty Bn CP
			Intel Sec		1 M577	132	4	Arty Bn CP
	HHB	Survey Plt	Plt HQ		1 HMMWV	67	3	Arty Bn CP
			Survey Sec		1 HMMWV	63	3	Arty Bn CP
	HHB	Commo Plt	Plt HQ		1 HMMWV	60	6	Arty Bn CP
			Wire Sec		1 HMMWV	61	5	Arty Bn CP
			Radio Sec		1 HMMWV	65	3	Arty Bn CP
					4 FIST-V	310	4	line
						307	4	line
						308	4	line
						309	4	line
Fld Arty Bn	Fld Arty Batt 1		Batt HQ		1 Truck	259	3	1 TFA
					1 HMMWV	23	2	1 TFA
						25	2	1 TFA
			Commo Sec		1 HMMWV	28	2	1 TFA
	Fld Arty Batt 1	Firing Plt 1	Plt HQ		4 HMMWV	24	2	1 TFA
						26	2	1 TFA
						27	2	1 TFA
						29	2	1 TFA
	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 1		1 M577	128	8	1 TFA
			Fire Direction Center 2		1 M577	129	8	1 TFA
			Howitzer Sec		8 M548	311[221]	0[4]	1 TFA
						312[217]	0[4]	1 TFA
						313[218]	0[4]	1 TFA
						314[219]	0[4]	1 TFA
						315[220]	0[4]	1 TFA
						316[222]	0[4]	1 TFA
						217[223]	0[4]	1 TFA
						318[224]	0[4]	1 TFA
					8 M109	293	5	1 TFA

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Howitzer Sec			294	5	1 TFA
						295	5	1 TFA
						296	5	1 TFA
						297	5	1 TFA
						298	5	1 TFA
						299	5	1 TFA
						300	5	1 TFA
				Ammo Sec	6 Truck	260	2	1 TFA
						261	2	1 TFA
						262	2	1 TFA
						256	2	1 TFA
						257	2	1 TFA
						258	2	1 TFA
		Smoke Plt	Plt HQ	1 M113		167	3	Fwd
				1 SMKGEN		70	18	Fwd
				2 Trucks (2 in 1 icon)		284	4	Cbt Train
		GSR Plt 2	Plt HQ	1 HMMWV		69	2	TF 1
				4 AN/PPS-5		186	3	Fwd
						187	3	Fwd
						188	3	Fwd
						189	3	Fwd

ADDITIONAL UNITS IN SCENARIO

HMMWV	57	0
HMMWV	58	0
M113	148	0
DISM	191	0
DISM	192	0
DISM	193	0
DISM	194	0
DISM	195	0
DISM	196	0
DISM	197	0
DISM	198	0
DISM	199	0
DISM	200	0
DISM	201	0
DISM	202	0
DISM	203	0
DISM	204	0
DISM	205	0
DISM	206	0
DISM	207	0
DISM	208	0
DISM	209	0
DISM	211	0
DISM	212	0

Table D1
Unit Description by Tactical Layout
Heavy Brigade, Forward Maneuver Battalion, Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						DISM	213	0
						DISM	214	0
						DISM	215	0
						DISM	216	0
						DISM	225	0
						DISM	226	0
						DISM	227	0
						DISM	228	0
						DISM	229	0
						DISM	230	0
						DISM	231	0
						DISM	232	0
						DISM	233	0
						DISM	234	0
						DISM	235	0
						DISM	236	0
						DISM	237	0
						DISM	238	0
						DISM	239	0
						DISM	240	0
						DISM	241	0
						DISM	242	0
						DISM	243	0
						DISM	244	0
						DISM	245	0
						DISM	246	0
						DISM	247	0
						DISM	248	0
						DISM	249	0
						DISM	250	0
						DISM	251	0
						DISM	252	0
						HM/STG	292	0
						M548	317	0

Notes:

FLD TRN: In brigade with FSB
 CBT TRN: In battalion near rear
 MAINT: In battalion near rear
 In BSA: BDE HHC
 FSB
 FLD TRN

Assumptions:

* No effort has been made to show the support elements (maint, supply, medic, and mess) that would accompany the tank co when it joined the mech TF and the rifle company that departed, because the total number of vehicles and personnel would be the same for all practical purposes. This will simplify the changes to the JANUS database.

* The ARTY battalion CP has been arbitrarily placed in the TF area as a representative of brigade assets that would be located in the TF area. The number of units could be larger or smaller depending on terrain and mission.

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
1	15.798	50.546	4	line	2	M1	HB FM DEF		Tank Co 1		HQ Sec			
2	15.935	50.561	4	line	2	M1	HB FM DEF		Tank Co 1		HQ Sec			
3	11.844	47.063	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
4	11.522	47.053	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
5	11.662	47.449	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
6	11.753	47.449	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
7	11.842	47.452	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
8	11.915	47.462	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
9	11.139	47.431	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
10	11.045	47.442	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
11	11.250	47.445	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
12	11.341	47.435	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
13	15.577	50.550	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
14	15.688	50.555	4	line	2	M1	HB FM DEF		Tank Co 1	Tank Plt				
15	11.948	44.446	3	1 TFA HHC Area	3	HMMWV	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)	Missile Sec			
16	11.847	44.587	2	1 TFA HHC Area	3	HMMWV	HB FM DEF		Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ			
17	11.466	46.869	2	Co Train	3	HMMWV	HB FM DEF		Tank Co 1		HQ Sec			
18	11.521	46.841	2	Co Train	3	HMMWV	HB FM DEF		Tank Co 1		HQ Sec			
19	9.531	49.106	1	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 2		HQ			
20	9.473	49.104	2	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 2		HQ			
21	16.703	48.480	1	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 3		HQ			
22	16.651	48.389	2	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 3		HQ			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
23	8.542	46.954	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			
24	8.524	46.961	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
25	14.154	43.337	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			
26	8.467	46.959	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
27	14.180	43.249	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
28	8.488	46.960	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Commo Sec			
29	14.268	43.345	2	1 TFA	3	HMMWV	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 1	Plt HQ			
30	14.801	48.279	2	Bn Rear	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
31	8.662	48.870	1	Bn Rear	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Plt HQ			
32	11.792	44.548	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		BN HQ Sec	Main CP Element		
33	11.948	44.446	1	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		BN HQ Sec	Main CP Element		
34	11.896	44.456	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
35	11.755	44.396	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
36	11.773	44.474	1	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		TACP Sec	Main CP Element		
37	11.849	44.493	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
38	10.930	37.318	2	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		S-4 Sec	Cbt Trains CP Element		
39	11.857	44.366	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		Co HQ	Main CP Element		
40	10.797	37.297	5	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		S-1 Sec			
41	11.940	44.365	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
42	11.953	44.514	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Main CP Element		
43	10.744	37.401	1	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Train CP Element		
44	10.463	37.339	2	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	BN Med Plt	Plt HQ			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
45	10.904	37.401	2	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			
46	10.857	37.427	0	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Plt HQ			
47	10.948	37.639	2	Cbt Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
48	13.452	48.264	1	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 1		HQ			
49	13.504	48.157	2	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	Rifle Co 1		HQ			
50	11.790	47.141	2	forward	3	HMMWV	HB FM DEF		Eng Co 1	Asl & Obs Plt	Plt HQ			
51	10.624	44.475	2	1 TFA	3	HMMWV	HB FM DEF		Eng Co 1		Co HQ			
52	10.631	44.733	2	1 TFA	3	HMMWV	HB FM DEF		Eng Co 1	Asl & Obs Plt	Plt HQ			
53	11.247	46.908	2	1 TFA	3	HMMWV	HB FM DEF		Eng Co 1	Eng Plt 1	Plt HQ 2			
54	10.749	44.438	2	1 TFA	3	HMMWV	HB FM DEF		Eng Co 1	Eng Plt 1	Plt HQ 2			
55*	27.745	6.606	2	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	AA Co		HQ			
56*	27.662	5.188	2	Co Train	3	HMMWV	HB FM DEF	Mech Inf Bn 1	AA Co		HQ			
59	6.777	41.230	3	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB		Batt HQ			
60	6.802	41.162	6	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB	Commo Plt	Plt HQ			
61	6.769	41.109	5	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB	Commo Plt	Wire Sec			
62	6.698	41.271	6	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB		Comm Sec			
63	6.726	41.115	3	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB		Survey Sec			
64	6.663	41.208	5	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB		Command Sec			
65	6.733	41.289	3	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB	Commo Plt	Radio Sec			
66	11.938	44.438	2	Main CP	3	HMMWV	HB FM DEF	Mech Inf Bn 1	HHC		FSE Section			
67	6.701	41.166	3	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB	Survey Plt	Plt HQ			
68	6.713	41.070	4	Arty Bn CP	3	HMMWV	HB FM DEF	Fld Arty Bn	HHB		Ops Sec			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
69	8.447	52.999	2	TF 1	3	HMMWV	HB FM DEF			GSR Plt 2	Plt HQ			
70	13.490	48.532	18	forward	6	SMKGEN	HB FM DEF			Smoke Plt			2 Smoke Sqds (6 tms)	
71	10.792	37.756	1	Cbt Train	7	CYCLE	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Train CP Element		
72	10.794	37.683	1	Cbt Train	7	CYCLE	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Train CP Element		
73	10.841	37.206	1	Cbt Train	7	CYCLE	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Train CP Element		
74	16.726	50.298	3	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3		HQ			
75	16.716	50.178	3	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3		HQ			
76	9.734	50.577	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
77	9.823	50.621	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
78	9.896	50.603	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
79	9.967	50.598	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
80	7.801	50.708	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
81	7.863	50.764	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
82	7.987	50.728	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
83	8.066	50.692	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
84	8.788	50.504	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
85	8.849	50.506	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
86	8.948	50.500	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
87	8.991	50.486	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
88	9.099	50.438	3	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2		HQ			
89	7.766	50.608	3	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 2		HQ			
90	17.840	50.499	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
91	17.876	50.348	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
92	17.736	50.374	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
93	17.610	50.434	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
94	16.744	50.496	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
95	17.131	50.470	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
96	16.985	50.491	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
97	16.865	50.491	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
98	12.188	47.396	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
99	12.240	47.476	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
100	12.353	47.466	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
101	12.416	47.419	4	line	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
102	12.489	50.495	3	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1		HQ			
103	13.558	50.594	3	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1		HQ			
104	12.834	50.654	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
105	13.645	50.853	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
106	12.671	50.683	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
107	14.066	50.819	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
108	12.738	50.667	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
109	12.599	50.677	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
110	13.770	50.859	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
111	13.927	50.833	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
112	11.555	50.608	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
113	11.396	50.608	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
114	11.475	50.622	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
115	11.688	50.601	4	reserve	9	M2	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
116	10.166	49.480	5	Tac CP	9	M2	HB FM DEF	Mech Inf Bn 1	HHC		Bn HQ Sec	Tac CP Element		
117	10.234	49.391	3	Tac CP	9	M2	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	Tac CP Element		
118	8.228	53.122	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
119	8.358	53.143	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	HQ Sec			
120	12.896	53.002	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
121	13.023	52.992	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
122	16.484	52.997	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
123	16.340	53.013	5	forward	10	M3	HB FM DEF	Mech Inf Bn 1	HHC	Bn Scout Plt	Scout Section			
124	11.803	44.430	6	Main CP	13	M577	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	Main CP Element		
125	11.841	44.433	4	Tac CP	13	M577	HB FM DEF	Mech Inf Bn 1	HHC		S-2 Sec	Main CP Element		
126	8.731	48.878	3	Bn rear	13	M577	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
127	14.897	48.230	3	Bn rear	13	M577	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt	Mort Sec HQ			
128	14.206	43.346	8	1 TFA	13	M577	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 1			
129	8.527	47.021	8	1 TFA	13	M577	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1	Firing Plt 2	Fire Direction Center 2			
130	10.865	37.347	3	Cbt Train	13	M577	HB FM DEF	Mech Inf Bn 1	HHC	Bn Commo Plt		Cbt Train CP Element		
131	10.823	37.519	2	Cbt Train	13	M577	HB FM DEF	Mech Inf Bn 1	HHC		S-4 Sec	Cbt Train CP Element		
132	6.705	41.227	4	Arty Bn CP	13	M577	HB FM DEF	Fld Arty Bn	HHB		Intel Sec			
133	6.731	41.230	5	Arty Bn CP	13	M577	HB FM DEF	Fld Arty Bn	HHB		Fire Dir Sec			
134	6.730	41.157	4	Arty Bn CP	13	M577	HB FM DEF	Fld Arty Bn	HHB		Ops Sec			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
135	10.812	37.913	2	Cbt Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
136	11.504	46.883	3	Cbt Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
137	11.421	46.891	3	Co Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
138	16.609	48.655	3	Co Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
139	9.529	49.003	3	Co Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 2
140	10.945	37.527	2	Cbt Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
141	10.896	37.670	2	Cbt Train	14	M88A1	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
142	10.870	37.693	2	1 TFA HHC Area	15	M113	HB FM DEF		Air Def Arty Batt(-)	Gun Plt	Gun Plt HQ			
143	10.531	44.636	2	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 1	Plt HQ 1			
144	11.197	46.981	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 1	
145	11.255	47.090	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 2	
146	11.275	46.996	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 3	
147	10.670	44.618	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 6	
149	10.678	44.506	3	1 TFA	15	M113	HB FM DEF		Eng Co 1		Co HQ			
150	10.733	44.618	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 4	
151	13.525	48.244	2	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	Rifle Co 1		HQ			
152	12.856	50.355	6	Co Train	15	M13	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				AA Co Maint Team
153	13.540	48.367	4	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
154	16.679	48.559	4	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
155*	27.596	6.194	4	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
156	9.599	49.026	4	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 3
157	11.070	37.707	2	Cbt Train	15	M113	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
158	10.148	49.313	4	Main CP	15	M113	HB FM DEF	Mech Inf Bn 1	HHC		S-3 Sec	TAC CP Element		
159	16.575	48.486	2	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	Rifle Co 3		HQ			
160	9.458	48.992	2	Co Train	15	M113	HB FM DEF	Mech Inf Bn 1	Rifle Co 2		HQ			
161	11.135	47.004	2	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 1	Plt HQ 1			
162	7.334	49.960	3	line	15	M113	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
163	6.739	50.143	3	line	15	M113	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
164	14.319	49.968	3	line	15	M113	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
165	7.423	49.917	4	line	15	M113	HB FM DEF	Mech Inf Bn 1	AA Co		HQ			
166	10.631	44.556	8	1 TFA	15	M113	HB FM DEF		Eng Co 1	Eng Plt 2			Eng Sqd 5	
167	11.875	44.589	3	forward	15	M113	HB FM DEF			Smoke Plt	Plt HQ			
168	7.051	50.341	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
169	7.285	50.252	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
170	6.546	50.018	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
171	6.592	50.130	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
172	6.805	50.267	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
173	6.648	50.173	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
174	14.649	49.922	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
175	14.291	50.162	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
176	14.532	50.041	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
177	14.403	50.092	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
178	7.365	50.305	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				
179	7.128	50.344	4	line	16	ITV-TOW	HB FM DEF	Mech Inf Bn 1	AA Co	AA Plt				

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
180	10.677	38.512	4	1 TFA	17	Vulcan	HB FM DEF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 1	
181	11.428	38.418	4	1 TFA	17	Vulcan	HB FM DEF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 2	
182	10.160	38.142	4	1 TFA	17	Vulcan	HB FM DEF		Air Def Arty Batt(-)	Gun Plt			Gun Sqd 3	
185	12.438	50.621	2	Main CP	19	COLT	HB FM DEF	Mech Inf Bn 1	HHC		FSE Section			
186	16.583	52.765	3	forward	21	AN/PPS-5	HB FM DEF			GSR Plt 2			GSR SQUAD 1	
187	16.604	52.637	3	forward	21	AN/PPS-5	HB FM DEF			GSR Plt 2			GSR SQUAD 1	
188	12.807	52.968	3	forward	21	AN/PPS-5	HB FM DEF			GSR Plt 2			GSR SQUAD 2	
189	8.588	53.062	3	forward	21	AN/PPS-5	HB FM DEF			GSR Plt 2			GSR SQUAD 2	
190	10.571	44.446	8	forward	24	2 CEV (2 in 1 icon)	HB FM DEF		Eng Co 1 Field Arty Batt 1	Asl & Obs Plt	Assault Sec 2			
217	14.343	43.463	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn			Howitzer Sec			
218	14.126	43.386	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
219	14.026	43.496	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
220	14.126	43.325	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
221	8.456	47.003	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
222	8.469	47.067	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
223	8.521	47.070	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
224	8.494	47.075	4	1 TFA	28	DISM (M548)	HB FM DEF	Field Arty Bn	Field Arty Batt 1		Howitzer Sec			
253	16.496	48.470	4	forward	31	AVLB (2 in 1 icon)	HB FM DEF		Eng Co 1	Asl & Obs Plt	Assault Sec 1			
254	16.773	48.436	4	forward	31	AVLB (2 in 1 icon)	HB FM DEF		Eng Co 1	Asl & Obs Plt	Assault Sec 1			
255	11.809	47.158	7	1 TFA	32	ACE (7 in 1 icon)	HB FM DEF		Eng Co 1	Asl & Obs Plt	Obstacle Sec			
256	8.601	46.901	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
257	8.424	46.917	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
258	8.403	46.914	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
259	8.572	46.898	3	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Batt HQ			
260	14.029	43.173	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
261	14.101	43.170	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
262	14.059	43.268	2	1 TFA	34	TRUCK	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Ammo Sec			
263	11.107	37.193	2	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
264	11.055	37.800	6	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
265	11.023	37.399	3	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
266	10.804	37.172	5	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
267	10.904	37.540	4	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
268	10.713	37.514	5	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Maint/SVC Sec			
269	10.804	37.388	2	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 1
270	10.922	37.125	2	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				AA Co Maint Team
271	10.540	44.432	3	1 TFA	34	TRUCK	HB FM DEF		Eng Co 1		Co HQ			
272	10.544	44.527	3	1 TFA	34	TRUCK	HB FM DEF		Eng Co 1		Co HQ			
273	10.911	37.396	4	Co Train	34	TRUCK (2 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
274	10.911	37.542	4	Cbt Train	34	TRUCK (2 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
275	11.070	37.587	4	Cbt Train	34	TRUCK (2 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
276	10.945	37.696	4	Cbt Train	34	TRUCK (2 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt				Rifle Co Maint Team 4
277	10.726	37.727	1	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
278	10.760	37.219	1	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
279	10.984	37.216	1	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
280	11.117	37.373	2	Cbt Train	34	TRUCK	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Admin Sec			
281	10.432	37.409	2	Cbt Train	34	TRUCK (2 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	BN Med Plt	Aid Station			
282	10.763	37.514	2	Bn Trains	34		HB FM DEF		Tank Co 1		HQ Sec			
283	6.795	41.101	4	Arty Bn CP	34	TRUCK	HB FM DEF	Fld Arty Bn	HHB		Fire Dir Sec			
284	10.744	37.636	4	Cbt Train	34	TRUCK (2 in 1 icon)	HB FM DEF			Smoke Plt			Sppt Sqd	
285	14.136	50.697	2	1 TFA Co	37	HM/STG	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
286	7.486	50.366	2	1 TFA HHC Area	37	HM/STG	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
287	7.633	50.526	2	1 TFA Co	37	HM/STG	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
290	16.604	50.222	2	1 TFA Co	37	HM/STG	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
291	11.500	47.434	2	1 TFA Co	37	HM/STG	HB FM DEF		Air Def Arty Batt(-)	Missile Plt(-)				Missile Team
293	8.543	47.116	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
294	8.467	47.115	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
295	8.492	47.117	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
296	8.516	47.115	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
297	14.094	43.553	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
298	14.136	43.545	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
299	14.204	43.552	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
300	14.257	43.557	5	1 TFA	50	M109	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
301	8.813	49.005	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
302	8.698	48.995	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
303	8.586	48.990	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
304	14.859	48.327	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
305	14.743	48.341	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
306	14.964	48.327	4	bn rear	52	4.2MTR	HB FM DEF	Mech Inf Bn 1	HHC	Hvy Mort Plt			Mortar Squad	
307	6.899	50.301	4	line	56	FISTV	HB FM DEF	Fld Arty Bn	HHB					Mech Inf FIST Tm 1
308	9.155	50.350	4	line	56	FISTV	HB FM DEF	Fld Arty Bn	HHB					Mech Inf FIST Tm 2
309	12.555	50.431	4	line	56	FISTV	HB FM DEF	Fld Arty Bn	HHB					Mech Inf FIST Tm 3
310	16.544	50.298	4	line	56	FISTV	HB FM DEF	Fld Arty Bn	HHB					Tank Co FIST Tm
311	8.553	47.024	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
312	14.286	43.470	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
313	14.219	43.465	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
314	14.091	43.446	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
315	14.169	43.458	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
316	8.510	47.019	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
318	8.496	47.014	0	1 TFA	58	M548	HB FM DEF	Fld Arty Bn	Fld Arty Batt 1		Howitzer Sec			
319	10.888	37.255	8	Cbt Train	86	4 HEMMTC (4 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
320	10.938	37.620	4	Cbt Train	89	4 HEMTTP (4 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Spt Plt	Class III & V Team			
321	11.039	37.195	1	Cbt Train	90	HEMTTW	HB FM DEF	Mech Inf Bn 1	HHC	Bn Maint Plt	Spt Sec			
322	10.479	37.545	4	Cbt Train	95	M577-AMB	HB FM DEF	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
323	10.463	37.224	3	Cbt Train	95	M577-AMB	HB FM DEF	Mech Inf Bn 1	HHC	Bn Med Plt	Aid Station			
324	10.531	37.427	3	Cbt Train	96	M577-AMB	HB FM DEF	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			
325	10.510	37.141	14	Cbt Train	96	7 M113-AMB (7 in 1 icon)	HB FM DEF	Mech Inf Bn 1	HHC	Bn Med Plt	Evac Sec			
344	12.300	47.428	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
345	12.133	47.423	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
346	12.468	47.416	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
347	7.753	50.700	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
348	7.928	50.753	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
349	8.115	50.670	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
350	8.732	50.500	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
351	8.904	50.514	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 2				
352	9.050	50.473	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 3				
353	9.692	50.529	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
354	9.773	50.620	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
355	11.345	50.611	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
356	10.024	50.567	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 2	Rifle Plt 1				
357	11.624	50.617	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
358	11.743	50.608	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 3				
359	12.536	50.676	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
360	12.789	50.679	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
361	12.893	50.650	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
362	13.595	50.843	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
363	13.856	50.852	5	reserve	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 2				
364	14.132	50.824	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 1	Rifle Plt 1				
365	16.923	50.513	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 3				
366	17.078	50.479	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
367	16.678	50.506	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
368	17.519	50.443	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
369	17.725	50.483	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 1				
370	17.960	50.321	5	line	40	FOXH (M2)	HB FM DEF	Mech Inf Bn 1	Rifle Co 3	Rifle Plt 2				
Additional Icons in Scenario:														
57	13.381	48.329	0		3	HMMWV								
58	13.379	48.199	0		3	HMMWV								
148	10.595	44.605	0		15	M113								
191	14.307	43.252	0		26	DISM								
192	14.000	43.325	0		26	DISM								
193	8.496	46.922	0		26	DISM								
194	8.569	46.976	0		26	DISM								
195	13.677	50.760	0		26	DISM								
196	12.693	50.589	0		26	DISM								
197	11.606	50.527	0		26	DISM								
198	12.808	50.583	0		26	DISM								
199	13.783	50.766	0		26	DISM								
200	11.860	44.640	0		26	DISM								
201	11.912	44.535	0		26	DISM								
202	11.832	44.534	0		26	DISM								
203	11.802	44.363	0		26	DISM								
204	10.606	44.552	0		26	DISM								
205	6.752	41.241	0		26	DISM								

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
206	11.000	37.396	0		26	DISM								
207	10.961	37.310	0		26	DISM								
208	10.671	37.360	0		26	DISM								
209	10.815	37.647	0		26	DISM								
211	10.919	37.670	0		26	DISM								
212	6.782	41.125	0		28	DISM								
213	10.725	44.493	0		28	DISM								
214	10.480	44.623	0		28	DISM								
215	10.568	44.508	0		28	DISM								
216	14.292	43.543	0		28	DISM								
225	8.548	47.073	0		28	DISM								
226	10.904	37.503	0		28	DISM								
227	10.846	37.597	0		28	DISM								
228	10.731	37.321	0		28	DISM								
229	10.844	37.772	0		28	DISM								
230	6.752	41.174	0		29	DISM								
231	6.690	41.121	0		29	DISM								
232	11.124	47.090	0		29	DISM								
233	11.312	46.921	0		29	DISM								
234	11.184	47.075	0		29	DISM								
235	14.118	50.769	0		29	DISM								
236	10.647	44.655	0		29	DISM								

Table D2
Unit Description by Icon Number
Heavy Brigade, Forward Maneuver Battalion, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Icon Type	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
237	10.585	44.650	0		29	DISM								
238	10.714	44.605	0		29	DISM								
239	13.456	48.188	0		29	DISM								
240	11.010	37.519	0		29	DISM								
241	11.748	50.555	0		29	DISM								
242	11.473	50.533	0		29	DISM								
243	13.514	50.653	0		29	DISM								
244	12.622	50.585	0		29	DISM								
245	13.995	50.787	0		29	DISM								
246	12.874	50.583	0		29	DISM								
247	10.917	37.850	0		29	DISM								
248	10.906	37.740	0		29	DISM								
249	10.880	37.594	0		29	DISM								
250	10.859	37.107	0		29	DISM								
251	10.917	37.795	0		29	DISM								
252	10.885	37.521	0		29	DISM								
292	10.945	37.451	0		37	HM/STG								
317	8.472	47.011	0		58	M548								

Figure D1
Unit Layout: Standard Scale
Heavy Brigade, Forward Maneuver, Defense

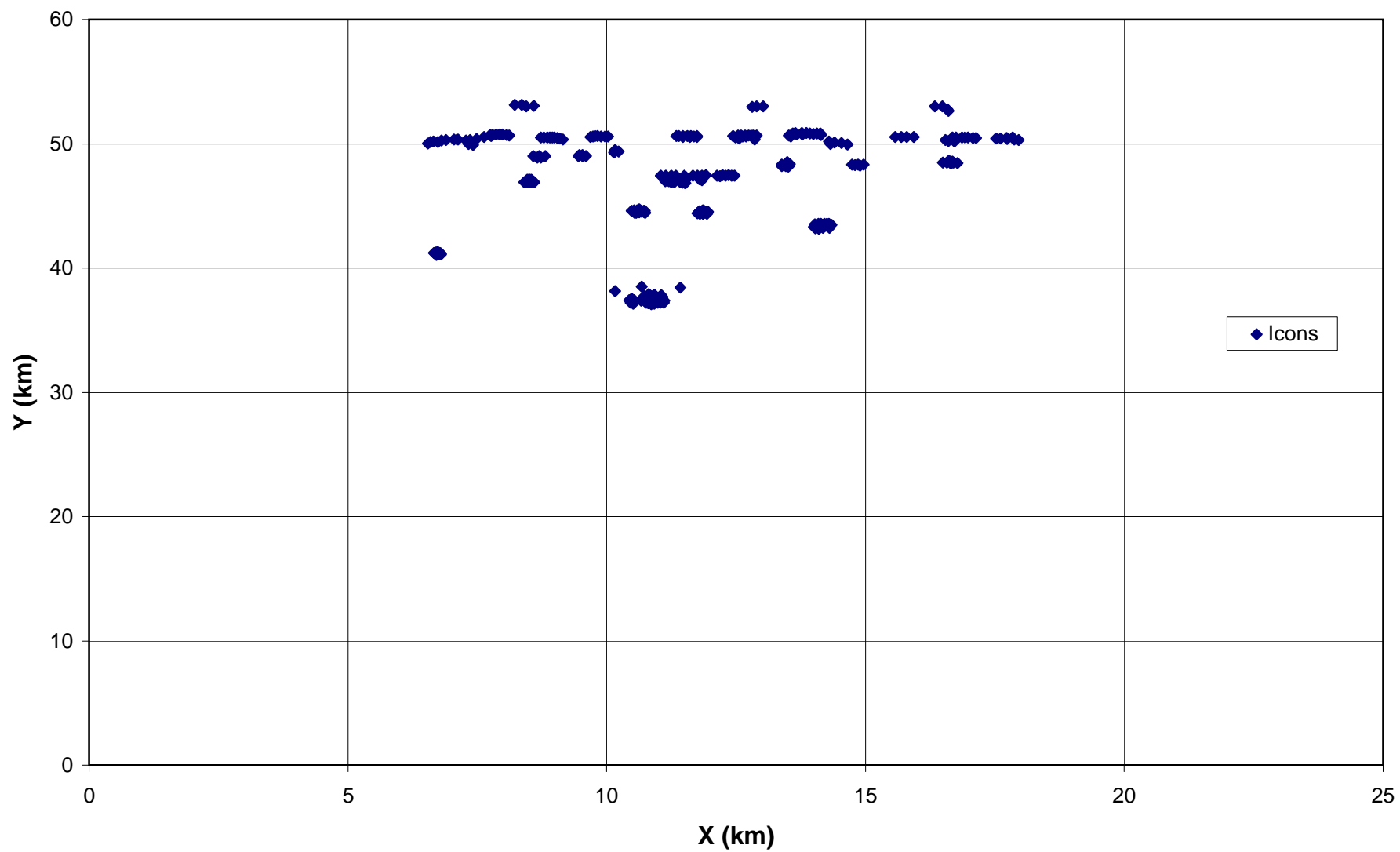


Figure D2
Unit Layout: Small Scale
Heavy Brigade, Forward Maneuver, Defense

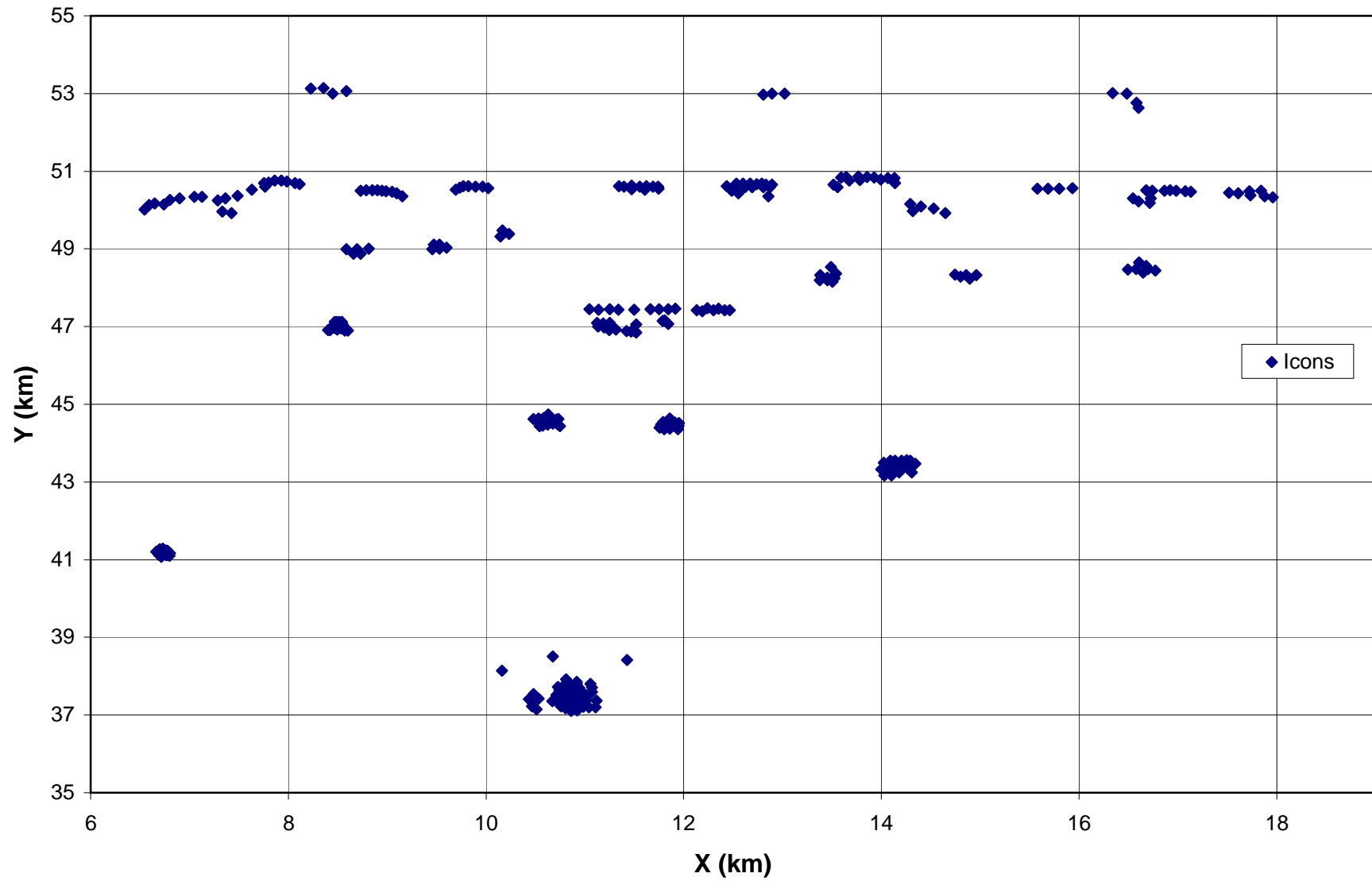


Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

Sarin (GB) 152mm Artillery
 Light Attack
 Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected 18 rounds at aimpoint (10.80, 38.20)												
38	10.93	37.318	2	2.96E+00	0.00E+00	2.96E+00	2.96E+00	0.00E+00	1.30E-02	2.97E+00	2	
40	10.797	37.297	5	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.30E-01	2.98E+01	5	
43	10.744	37.401	1	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.36E-02	1.92E+01	5	
45	10.904	37.401	1	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.66E-02	1.99E+01	5	
46	10.857	37.427	1	5.50E+01	0.00E+00	5.50E+01	5.50E+01	0.00E+00	2.41E-01	5.52E+01	7	
47	10.948	37.639	2	3.02E+00	0.00E+00	3.02E+00	3.02E+00	0.00E+00	1.32E-02	3.03E+00	3	
69	10.792	37.756	1	1.60E+02	0.00E+00	1.60E+02	1.60E+02	0.00E+00	7.00E-01	1.61E+02	8	
70	10.794	37.683	1	1.31E+02	0.00E+00	1.31E+02	1.31E+02	0.00E+00	5.73E-01	1.32E+02	8	
71	10.841	37.206	1	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.91E-02	1.59E+01	5	
128	10.865	37.347	3	3.66E+01	0.00E+00	3.66E+01	3.66E+01	0.00E+00	1.60E-01	3.68E+01	6	
129	10.823	37.519	2	8.81E+01	0.00E+00	8.81E+01	8.81E+01	0.00E+00	3.85E-01	8.85E+01	8	
133	10.812	37.913	2	2.94E+02	0.00E+00	2.94E+02	2.94E+02	0.00E+00	1.29E+00	2.95E+02	8	
138	10.945	37.527	2	3.85E+00	0.00E+00	3.85E+00	3.85E+00	0.00E+00	1.68E-02	3.87E+00	3	
139	10.896	37.67	2	6.14E+01	0.00E+00	6.14E+01	6.14E+01	0.00E+00	2.69E-01	6.17E+01	7	
140	10.87	37.693	2	1.11E+02	0.00E+00	1.11E+02	1.11E+02	0.00E+00	4.86E-01	1.11E+02	8	
207	10.804	37.172	5	9.57E+00	0.00E+00	9.57E+00	9.57E+00	0.00E+00	4.19E-02	9.61E+00	4	
208	10.904	37.54	4	3.23E+01	0.00E+00	3.23E+01	3.23E+01	0.00E+00	1.41E-01	3.24E+01	6	
209	10.713	37.514	5	5.40E+00	0.00E+00	5.40E+00	5.40E+00	0.00E+00	2.36E-02	5.42E+00	3	
210	10.804	37.388	2	4.98E+01	0.00E+00	4.98E+01	4.98E+01	0.00E+00	2.18E-01	5.00E+01	7	
214	10.911	37.396	4	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.30E-02	1.45E+01	4	
215	10.911	37.542	4	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5	
217	10.945	37.696	4	3.22E+00	0.00E+00	3.22E+00	3.22E+00	0.00E+00	1.41E-02	3.23E+00	3	
218	10.726	37.727	1	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.05E-02	1.85E+01	5	
219	10.76	37.219	1	7.24E+00	0.00E+00	7.24E+00	7.24E+00	0.00E+00	3.17E-02	7.27E+00	4	
223	10.763	37.514	2	4.78E+01	0.00E+00	4.78E+01	4.78E+01	0.00E+00	2.09E-01	4.80E+01	6	
225	10.744	37.636	4	4.02E+01	0.00E+00	4.02E+01	4.02E+01	0.00E+00	1.76E-01	4.04E+01	6	
249	10.888	37.255	8	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.60E-02	1.29E+01	4	
250	10.938	37.62	4	7.22E+00	0.00E+00	7.22E+00	7.22E+00	0.00E+00	3.16E-02	7.25E+00	4	
Case 2: Protected 18 rounds at aimpoint (6.70, 41.20)												
60	6.802	41.162	6	1.86E+01	0.00E+00	1.86E+01	2.25E+01	0.00E+00	9.84E-02	1.87E+01	5	
61	6.769	41.109	5	4.30E+01	0.00E+00	4.30E+01	4.03E+02	0.00E+00	1.76E+00	4.48E+01	6	
62	6.698	41.271	6	4.58E+01	0.00E+00	4.58E+01	6.19E+01	0.00E+00	2.71E-01	4.61E+01	6	
63	6.726	41.115	3	2.71E+01	0.00E+00	2.71E+01	1.56E+02	0.00E+00	6.83E-01	2.78E+01	5	
64	6.663	41.208	5	7.64E+01	0.00E+00	7.64E+01	4.60E+02	0.00E+00	2.01E+00	7.84E+01	8	
65	6.733	41.289	3	1.53E+01	0.00E+00	1.53E+01	2.08E+01	0.00E+00	9.10E-02	1.54E+01	5	
67	6.701	41.166	3	5.39E+01	0.00E+00	5.39E+01	2.85E+02	0.00E+00	1.25E+00	5.51E+01	7	
68	6.713	41.07	4	3.55E-01	0.00E+00	3.55E-01	6.07E+02	0.00E+00	2.66E+00	3.01E+00	3	
132	6.705	41.227	4	1.40E+01	0.00E+00	1.40E+01	1.96E+02	0.00E+00	8.58E-01	1.49E+01	4	
133	6.731	41.23	5	4.16E+00	0.00E+00	4.16E+00	4.53E+01	0.00E+00	1.98E-01	4.36E+00	3	
134	6.73	41.157	4	9.76E+01	0.00E+00	9.76E+01	2.37E+02	0.00E+00	1.04E+00	9.86E+01	8	
283	6.795	41.101	4	3.04E+00	0.00E+00	3.04E+00	2.15E+02	0.00E+00	9.41E-01	3.98E+00	3	

Sarin (GB) MRLS
 Moderate Attack
 Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				240 rounds at aimpoint (10.70, 39.60)								
38	10.93	37.318	2	9.85E+00	0.00E+00	9.85E+00	9.85E+00	0.00E+00	4.31E-02	9.89E+00	4	
40	10.797	37.297	5	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.38E-02	1.00E+01	4	
43	10.744	37.401	1	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.00E-02	1.61E+01	5	
44	10.463	37.339	2	7.08E+00	0.00E+00	7.08E+00	7.08E+00	0.00E+00	3.10E-02	7.11E+00	4	
45	10.904	37.401	1	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.30E-02	1.45E+01	4	
46	10.857	37.427	1	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.18E-02	1.65E+01	5	
47	10.948	37.639	2	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.01E-01	2.32E+01	5	

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

69	10.792	37.756	1	3.70E+01	0.00E+00	3.70E+01	3.70E+01	0.00E+00	1.62E-01	3.72E+01	6
70	10.794	37.683	1	3.25E+01	0.00E+00	3.25E+01	3.25E+01	0.00E+00	1.42E-01	3.26E+01	6
71	10.841	37.206	1	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.46E-02	5.65E+00	3
128	10.865	37.347	3	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.25E-02	1.21E+01	4
129	10.823	37.519	2	2.18E+01	0.00E+00	2.18E+01	2.18E+01	0.00E+00	9.54E-02	2.19E+01	5
133	10.812	37.913	2	4.66E+01	0.00E+00	4.66E+01	4.66E+01	0.00E+00	2.04E-01	4.68E+01	6
138	10.945	37.527	2	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
139	10.896	37.67	2	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.28E-01	2.94E+01	5
140	10.87	37.693	2	3.17E+01	0.00E+00	3.17E+01	3.17E+01	0.00E+00	1.39E-01	3.18E+01	6
154	11.07	37.707	2	5.94E+00	0.00E+00	5.94E+00	5.94E+00	0.00E+00	2.60E-02	5.97E+00	3
177	10.677	38.512	4	1.14E+02	0.00E+00	1.14E+02	1.14E+02	0.00E+00	4.99E-01	1.14E+02	8
205	11.055	37.8	6	9.48E+00	0.00E+00	9.48E+00	9.48E+00	0.00E+00	4.15E-02	9.52E+00	4
206	11.023	37.399	3	5.68E+00	0.00E+00	5.68E+00	5.68E+00	0.00E+00	2.49E-02	5.70E+00	3
207	10.804	37.172	5	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.05E-02	4.71E+00	3
208	10.904	37.54	4	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.58E-02	2.20E+01	5
209	10.713	37.514	5	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.02E-01	2.35E+01	5
210	10.804	37.388	2	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
211	10.922	37.125	2	3.13E+00	0.00E+00	3.13E+00	3.13E+00	0.00E+00	1.37E-02	3.14E+00	3
214	10.911	37.396	4	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.17E-02	1.42E+01	4
215	10.911	37.542	4	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.45E-02	2.17E+01	5
216	11.07	37.587	4	4.43E+00	0.00E+00	4.43E+00	4.43E+00	0.00E+00	1.94E-02	4.45E+00	3
217	10.945	37.696	4	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.13E-01	2.60E+01	5
218	10.726	37.727	1	3.69E+01	0.00E+00	3.69E+01	3.69E+01	0.00E+00	1.61E-01	3.71E+01	6
219	10.76	37.219	1	7.38E+00	0.00E+00	7.38E+00	7.38E+00	0.00E+00	3.23E-02	7.41E+00	4
220	10.984	37.216	1	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.56E-02	3.58E+00	3
221	11.117	37.373	2	1.51E-01	0.00E+00	1.51E-01	1.51E-01	0.00E+00	6.61E-04	1.52E-01	1
222	10.432	37.409	2	7.29E+00	0.00E+00	7.29E+00	7.29E+00	0.00E+00	3.19E-02	7.32E+00	4
223	10.763	37.514	2	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.71E-02	2.23E+01	5
225	10.744	37.636	4	3.04E+01	0.00E+00	3.04E+01	3.04E+01	0.00E+00	1.33E-01	3.05E+01	6
249	10.888	37.255	8	7.78E+00	0.00E+00	7.78E+00	7.78E+00	0.00E+00	3.40E-02	7.81E+00	4
250	10.938	37.62	4	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.01E-01	2.32E+01	5
251	11.039	37.195	1	1.04E+00	0.00E+00	1.04E+00	1.04E+00	0.00E+00	4.55E-03	1.04E+00	2
252	10.479	37.545	4	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.74E-02	1.55E+01	5
253	10.463	37.224	3	3.75E+00	0.00E+00	3.75E+00	3.75E+00	0.00E+00	1.64E-02	3.77E+00	3
254	10.531	37.427	3	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.17E-02	1.42E+01	4
255	10.51	37.141	14	3.08E+00	0.00E+00	3.08E+00	3.08E+00	0.00E+00	1.35E-02	3.09E+00	3

Case 2: Protected 240 rounds at aimpoint (11.10, 37.60)

38	10.93	37.318	2	1.26E+01	0.00E+00	1.26E+01	4.33E+02	0.00E+00	1.89E+00	1.45E+01	4
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	7.72E+01	0.00E+00	3.38E-01	3.38E-01	2
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	7.70E-01	0.00E+00	3.37E-03	3.37E-03	1
45	10.904	37.401	1	1.17E+01	0.00E+00	1.17E+01	5.88E+02	0.00E+00	2.57E+00	1.43E+01	4
46	10.857	37.427	1	1.97E+01	0.00E+00	1.97E+01	2.05E+02	0.00E+00	8.97E-01	2.06E+01	5
47	10.948	37.639	2	2.44E+02	0.00E+00	2.44E+02	9.43E+02	0.00E+00	4.13E+00	2.48E+02	8
71	10.792	37.756	1	1.77E+01	0.00E+00	1.77E+01	3.18E+01	0.00E+00	1.39E-01	1.78E+01	5
72	10.794	37.683	1	4.40E+01	0.00E+00	4.40E+01	9.59E+01	0.00E+00	4.20E-01	4.44E+01	6
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	1.72E+02	0.00E+00	7.53E-01	7.53E-01	2
130	10.865	37.347	3	2.99E+01	0.00E+00	2.99E+01	3.97E+02	0.00E+00	1.74E+00	3.16E+01	6
131	10.823	37.519	2	1.99E+02	0.00E+00	1.99E+02	6.66E+02	0.00E+00	2.91E+00	2.02E+02	8
140	10.945	37.527	2	5.65E+02	0.00E+00	5.65E+02	1.23E+03	0.00E+00	5.38E+00	5.70E+02	8
141	10.896	37.67	2	2.32E+01	0.00E+00	2.32E+01	2.45E+02	0.00E+00	1.07E+00	2.43E+01	5
142	10.87	37.693	2	8.18E+00	0.00E+00	8.18E+00	3.84E+02	0.00E+00	1.68E+00	9.86E+00	4
157	11.07	37.707	2	4.34E+01	0.00E+00	4.34E+01	4.98E+02	0.00E+00	2.18E+00	4.56E+01	6
263	11.107	37.193	2	5.96E+00	0.00E+00	5.96E+00	3.66E+02	0.00E+00	1.60E+00	7.56E+00	4
264	11.055	37.8	6	7.72E+01	0.00E+00	7.72E+01	6.03E+02	0.00E+00	2.64E+00	7.98E+01	8
265	11.023	37.399	3	5.49E+00	0.00E+00	5.49E+00	4.47E+02	0.00E+00	1.96E+00	7.45E+00	4
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	7.63E+01	0.00E+00	3.34E-01	3.34E-01	2
267	10.904	37.54	4	2.31E+02	0.00E+00	2.31E+02	4.80E+02	0.00E+00	2.10E+00	2.33E+02	8
269	10.804	37.388	2	1.75E+01	0.00E+00	1.75E+01	1.60E+02	0.00E+00	7.00E-01	1.82E+01	5
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	1.71E+02	0.00E+00	7.48E-01	7.48E-01	2
273	10.911	37.396	4	5.59E+00	0.00E+00	5.59E+00	5.60E+02	0.00E+00	2.45E+00	8.04E+00	4
274	10.911	37.542	4	2.70E+02	0.00E+00	2.70E+02	6.18E+02	0.00E+00	2.70E+00	2.73E+02	8
275	11.07	37.587	4	4.55E+00	0.00E+00	4.55E+00	2.71E+02	0.00E+00	1.19E+00	5.74E+00	3
276	10.945	37.696	4	2.95E+01	0.00E+00	2.95E+01	5.40E+02	0.00E+00	2.36E+00	3.19E+01	6
278	10.76	37.219	1	0.00E+00	0.00E+00	0.00E+00	2.39E+01	0.00E+00	1.05E-01	1.05E-01	1
279	10.984	37.216	1	6.96E+01	0.00E+00	6.96E+01	6.30E+02	0.00E+00	2.76E+00	7.24E+01	7
280	11.117	37.373	2	2.20E+02	0.00E+00	2.20E+02	7.37E+02	0.00E+00	3.22E+00	2.23E+02	8
282	10.763	37.514	2	1.05E+01	0.00E+00	1.05E+01	7.60E+01	0.00E+00	3.33E-01	1.08E+01	4
319	10.888	37.255	8	8.85E+00	0.00E+00	8.85E+00	4.30E+02	0.00E+00	1.88E+00	1.07E+01	4

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

320	10.938	37.62	4	3.27E+02	0.00E+00	3.27E+02	9.42E+02	0.00E+00	4.12E+00	3.31E+02	8
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	3.10E+02	0.00E+00	1.36E+00	1.36E+00	2

Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				720 rounds at aimpoint (10.80, 40.50)								
38	10.93	37.318	2	8.69E+00	0.00E+00	8.69E+00	8.69E+00	0.00E+00	3.80E-02	8.73E+00	4	
40	10.797	37.297	5	8.46E+00	0.00E+00	8.46E+00	8.46E+00	0.00E+00	3.70E-02	8.50E+00	4	
43	10.744	37.401	1	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4	
44	10.463	37.339	2	6.95E+00	0.00E+00	6.95E+00	6.95E+00	0.00E+00	3.04E-02	6.98E+00	4	
45	10.904	37.401	1	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4	
46	10.857	37.427	1	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.25E-02	1.21E+01	4	
47	10.948	37.639	2	1.75E+01	0.00E+00	1.75E+01	1.75E+01	0.00E+00	7.66E-02	1.76E+01	5	
69	10.792	37.756	1	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.71E-02	2.23E+01	5	
70	10.794	37.683	1	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.53E-02	1.96E+01	5	
71	10.841	37.206	1	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.03E-02	6.96E+00	4	
128	10.865	37.347	3	9.92E+00	0.00E+00	9.92E+00	9.92E+00	0.00E+00	4.34E-02	9.96E+00	4	
129	10.823	37.519	2	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.30E-02	1.45E+01	4	
133	10.812	37.913	2	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5	
138	10.945	37.527	2	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.17E-02	1.42E+01	4	
139	10.896	37.67	2	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.36E-02	1.92E+01	5	
140	10.87	37.693	2	1.99E+01	0.00E+00	1.99E+01	1.99E+01	0.00E+00	8.71E-02	2.00E+01	5	
154	11.07	37.707	2	1.77E+01	0.00E+00	1.77E+01	1.77E+01	0.00E+00	7.74E-02	1.78E+01	5	
177	10.677	38.512	4	5.19E+01	0.00E+00	5.19E+01	5.19E+01	0.00E+00	2.27E-01	5.21E+01	7	
178	11.428	38.418	4	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.46E-02	5.65E+00	3	
179	10.16	38.142	4	3.79E+00	0.00E+00	3.79E+00	3.79E+00	0.00E+00	1.66E-02	3.81E+00	3	
204	11.107	37.193	2	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.10E-02	4.83E+00	3	
205	11.055	37.8	6	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.14E-02	2.10E+01	5	
206	11.023	37.399	3	9.54E+00	0.00E+00	9.54E+00	9.54E+00	0.00E+00	4.17E-02	9.58E+00	4	
207	10.804	37.172	5	6.14E+00	0.00E+00	6.14E+00	6.14E+00	0.00E+00	2.69E-02	6.17E+00	4	
208	10.904	37.54	4	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.52E-02	1.50E+01	4	
209	10.713	37.514	5	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.95E-02	1.37E+01	4	
210	10.804	37.388	2	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4	
211	10.922	37.125	2	4.86E+00	0.00E+00	4.86E+00	4.86E+00	0.00E+00	2.13E-02	4.88E+00	3	
214	10.911	37.396	4	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.77E-02	1.09E+01	4	
215	10.911	37.542	4	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.52E-02	1.50E+01	4	
216	11.07	37.587	4	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.21E-02	1.43E+01	4	
217	10.945	37.696	4	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.44E-02	1.94E+01	5	
218	10.726	37.727	1	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.14E-02	2.10E+01	5	
219	10.76	37.219	1	6.80E+00	0.00E+00	6.80E+00	6.80E+00	0.00E+00	2.98E-02	6.83E+00	4	
220	10.984	37.216	1	5.90E+00	0.00E+00	5.90E+00	5.90E+00	0.00E+00	2.58E-02	5.93E+00	3	
221	11.117	37.373	2	8.23E+00	0.00E+00	8.23E+00	8.23E+00	0.00E+00	3.60E-02	8.27E+00	4	
222	10.432	37.409	2	7.91E+00	0.00E+00	7.91E+00	7.91E+00	0.00E+00	3.46E-02	7.94E+00	4	
223	10.763	37.514	2	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.08E-02	1.40E+01	4	
225	10.744	37.636	4	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.83E-02	1.80E+01	5	
249	10.888	37.255	8	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.39E-02	7.77E+00	4	
250	10.938	37.62	4	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.44E-02	1.71E+01	5	
251	11.039	37.195	1	5.11E+00	0.00E+00	5.11E+00	5.11E+00	0.00E+00	2.24E-02	5.13E+00	3	
252	10.479	37.545	4	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4	
253	10.463	37.224	3	4.84E+00	0.00E+00	4.84E+00	4.84E+00	0.00E+00	2.12E-02	4.86E+00	3	
254	10.531	37.427	3	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.38E-02	1.00E+01	4	
255	10.51	37.141	14	4.01E+00	0.00E+00	4.01E+00	4.01E+00	0.00E+00	1.75E-02	4.03E+00	3	
Case 2: Protected				720 rounds at aimpoint (10.70, 37.90)								
38	10.93	37.318	2	5.43E+00	0.00E+00	5.43E+00	2.09E+02	0.00E+00	9.14E-01	6.34E+00	4	
40	10.797	37.297	5	2.35E+00	0.00E+00	2.35E+00	3.87E+02	0.00E+00	1.69E+00	4.04E+00	3	
43	10.744	37.401	1	9.45E+01	0.00E+00	9.45E+01	5.27E+02	0.00E+00	2.31E+00	9.68E+01	8	
44	10.463	37.339	2	2.25E+01	0.00E+00	2.25E+01	3.93E+02	0.00E+00	1.72E+00	2.42E+01	5	
45	10.904	37.401	1	6.81E+00	0.00E+00	6.81E+00	2.86E+02	0.00E+00	1.25E+00	8.06E+00	4	
46	10.857	37.427	1	1.61E+02	0.00E+00	1.61E+02	4.65E+02	0.00E+00	2.03E+00	1.63E+02	8	
47	10.948	37.639	2	8.74E+01	0.00E+00	8.74E+01	4.25E+02	0.00E+00	1.86E+00	8.93E+01	8	
71	10.792	37.756	1	3.60E+01	0.00E+00	3.60E+01	3.76E+02	0.00E+00	1.65E+00	3.76E+01	6	

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

72	10.794	37.683	1	4.23E+01	0.00E+00	4.23E+01	4.52E+02	0.00E+00	1.98E+00	4.43E+01	6
73	10.841	37.206	1	1.51E-02	0.00E+00	1.51E-02	2.73E+02	0.00E+00	1.19E+00	1.21E+00	2
130	10.865	37.347	3	5.13E+01	0.00E+00	5.13E+01	3.65E+02	0.00E+00	1.60E+00	5.29E+01	7
131	10.823	37.519	2	1.87E+02	0.00E+00	1.87E+02	6.04E+02	0.00E+00	2.64E+00	1.90E+02	8
135	10.812	37.913	2	3.01E+01	0.00E+00	3.01E+01	2.69E+02	0.00E+00	1.18E+00	3.13E+01	6
140	10.945	37.527	2	2.38E+01	0.00E+00	2.38E+01	2.70E+02	0.00E+00	1.18E+00	2.50E+01	5
141	10.896	37.67	2	1.04E+02	0.00E+00	1.04E+02	4.41E+02	0.00E+00	1.93E+00	1.06E+02	8
142	10.87	37.693	2	1.37E+02	0.00E+00	1.37E+02	4.35E+02	0.00E+00	1.90E+00	1.39E+02	8
157	11.07	37.707	2	2.76E+02	0.00E+00	2.76E+02	8.26E+02	0.00E+00	3.61E+00	2.80E+02	8
182	10.16	38.142	4	8.82E+00	0.00E+00	8.82E+00	3.78E+01	0.00E+00	1.65E-01	8.99E+00	4
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	1.73E+02	0.00E+00	7.57E-01	7.57E-01	2
264	11.055	37.8	6	2.26E+02	0.00E+00	2.26E+02	6.14E+02	0.00E+00	2.69E+00	2.29E+02	8
265	11.023	37.399	3	1.35E+02	0.00E+00	1.35E+02	4.54E+02	0.00E+00	1.99E+00	1.37E+02	8
266	10.804	37.172	5	5.23E-02	0.00E+00	5.23E-02	2.68E+02	0.00E+00	1.17E+00	1.22E+00	2
267	10.904	37.54	4	2.42E+01	0.00E+00	2.42E+01	3.48E+02	0.00E+00	1.52E+00	2.57E+01	5
268	10.713	37.514	5	1.58E+02	0.00E+00	1.58E+02	6.48E+02	0.00E+00	2.84E+00	1.61E+02	8
269	10.804	37.388	2	5.82E+01	0.00E+00	5.82E+01	5.09E+02	0.00E+00	2.23E+00	6.04E+01	7
270	10.922	37.125	2	9.39E-01	0.00E+00	9.39E-01	1.59E+02	0.00E+00	6.96E-01	1.63E+00	2
273	10.911	37.396	4	6.70E+00	0.00E+00	6.70E+00	2.70E+02	0.00E+00	1.18E+00	7.88E+00	4
274	10.911	37.542	4	2.66E+01	0.00E+00	2.66E+01	3.39E+02	0.00E+00	1.48E+00	2.81E+01	5
275	11.07	37.587	4	1.98E+02	0.00E+00	1.98E+02	6.50E+02	0.00E+00	2.84E+00	2.01E+02	8
276	10.945	37.696	4	1.19E+02	0.00E+00	1.19E+02	5.03E+02	0.00E+00	2.20E+00	1.21E+02	8
277	10.726	37.727	1	1.79E+02	0.00E+00	1.79E+02	4.45E+02	0.00E+00	1.95E+00	1.81E+02	8
278	10.76	37.219	1	1.78E+01	0.00E+00	1.78E+01	2.82E+02	0.00E+00	1.23E+00	1.90E+01	5
279	10.984	37.216	1	2.91E-03	0.00E+00	2.91E-03	2.35E+02	0.00E+00	1.03E+00	1.03E+00	2
280	11.117	37.373	2	4.13E+01	0.00E+00	4.13E+01	3.05E+02	0.00E+00	1.33E+00	4.26E+01	6
281	10.432	37.409	2	5.79E+01	0.00E+00	5.79E+01	3.65E+02	0.00E+00	1.60E+00	5.95E+01	7
282	10.763	37.514	2	1.45E+02	0.00E+00	1.45E+02	7.05E+02	0.00E+00	3.08E+00	1.48E+02	8
284	10.744	37.636	4	1.82E+02	0.00E+00	1.82E+02	5.18E+02	0.00E+00	2.27E+00	1.84E+02	8
319	10.888	37.255	8	7.89E+00	0.00E+00	7.89E+00	2.56E+02	0.00E+00	1.12E+00	9.01E+00	4
320	10.938	37.62	4	7.52E+01	0.00E+00	7.52E+01	4.00E+02	0.00E+00	1.75E+00	7.70E+01	8
321	11.039	37.195	1	1.57E-03	0.00E+00	1.57E-03	2.33E+02	0.00E+00	1.02E+00	1.02E+00	2
322	10.479	37.545	4	1.02E+02	0.00E+00	1.02E+02	5.66E+02	0.00E+00	2.48E+00	1.04E+02	8
323	10.463	37.224	3	1.72E-01	0.00E+00	1.72E-01	2.95E+02	0.00E+00	1.29E+00	1.46E+00	2
324	10.531	37.427	3	4.47E+01	0.00E+00	4.47E+01	5.07E+02	0.00E+00	2.22E+00	4.69E+01	6
325	10.51	37.141	14	8.17E+00	0.00E+00	8.17E+00	2.21E+02	0.00E+00	9.67E-01	9.14E+00	4

Sarin (GB) 250kg Bomb

Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				2 rounds at aimpoint (10.90, 39.20)								
38	10.93	37.318	2	6.31E-01	0.00E+00	6.31E-01	6.31E-01	0.00E+00	2.76E-03	6.34E-01	2	
40	10.797	37.297	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.38E-02	1.24E+01	4	
43	10.744	37.401	1	9.62E+00	0.00E+00	9.62E+00	9.62E+00	0.00E+00	4.21E-02	9.66E+00	4	
45	10.904	37.401	1	7.98E+00	0.00E+00	7.98E+00	7.98E+00	0.00E+00	3.49E-02	8.01E+00	4	
46	10.857	37.427	1	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.82E-02	1.34E+01	4	
47	10.948	37.639	2	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.50E-02	5.75E+00	3	
69	10.792	37.756	1	2.29E+01	0.00E+00	2.29E+01	2.29E+01	0.00E+00	1.00E-01	2.30E+01	5	
70	10.794	37.683	1	2.04E+01	0.00E+00	2.04E+01	2.04E+01	0.00E+00	8.93E-02	2.05E+01	5	
71	10.841	37.206	1	9.42E+00	0.00E+00	9.42E+00	9.42E+00	0.00E+00	4.12E-02	9.46E+00	4	
128	10.865	37.347	3	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4	
129	10.823	37.519	2	1.72E+01	0.00E+00	1.72E+01	1.72E+01	0.00E+00	7.53E-02	1.73E+01	5	
133	10.812	37.913	2	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5	
138	10.945	37.527	2	3.51E+00	0.00E+00	3.51E+00	3.51E+00	0.00E+00	1.54E-02	3.53E+00	3	
139	10.896	37.67	2	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	5.99E-02	1.38E+01	4	
140	10.87	37.693	2	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.92E-02	1.82E+01	5	
154	11.07	37.707	2	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.45E-02	2.17E+01	5	
204	11.107	37.193	2	8.71E+00	0.00E+00	8.71E+00	8.71E+00	0.00E+00	3.81E-02	8.75E+00	4	
205	11.055	37.8	6	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.05E-01	2.41E+01	5	
206	11.023	37.399	3	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.60E-02	1.29E+01	4	
207	10.804	37.172	5	9.70E+00	0.00E+00	9.70E+00	9.70E+00	0.00E+00	4.24E-02	9.74E+00	4	
208	10.904	37.54	4	9.38E+00	0.00E+00	9.38E+00	9.38E+00	0.00E+00	4.10E-02	9.42E+00	4	

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

209	10.713	37.514	5	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.42E-02	5.56E+00	3
210	10.804	37.388	2	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.04E-02	1.39E+01	4
211	10.922	37.125	2	1.32E-01	0.00E+00	1.32E-01	1.32E-01	0.00E+00	5.78E-04	1.33E-01	1
214	10.911	37.396	4	6.33E+00	0.00E+00	6.33E+00	6.33E+00	0.00E+00	2.77E-02	6.36E+00	4
215	10.911	37.542	4	8.30E+00	0.00E+00	8.30E+00	8.30E+00	0.00E+00	3.63E-02	8.34E+00	4
216	11.07	37.587	4	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.14E-02	1.87E+01	5
217	10.945	37.696	4	5.64E+00	0.00E+00	5.64E+00	5.64E+00	0.00E+00	2.47E-02	5.66E+00	3
218	10.726	37.727	1	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.08E-02	1.17E+01	4
219	10.76	37.219	1	7.69E+00	0.00E+00	7.69E+00	7.69E+00	0.00E+00	3.36E-02	7.72E+00	4
220	10.984	37.216	1	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.61E-02	3.70E+00	3
221	11.117	37.373	2	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.03E-02	1.16E+01	4
223	10.763	37.514	2	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.91E-02	1.36E+01	4
225	10.744	37.636	4	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.86E-02	1.35E+01	4
249	10.888	37.255	8	6.30E+00	0.00E+00	6.30E+00	6.30E+00	0.00E+00	2.76E-02	6.33E+00	4
250	10.938	37.62	4	6.10E+00	0.00E+00	6.10E+00	6.10E+00	0.00E+00	2.67E-02	6.13E+00	4
251	11.039	37.195	1	9.05E+00	0.00E+00	9.05E+00	9.05E+00	0.00E+00	3.96E-02	9.09E+00	4

Case 2: Protected 2 rounds at aimpoint (13.30, 48.60)

48	13.452	48.264	1	0.00E+00	0.00E+00	0.00E+00	2.64E+02	0.00E+00	1.16E+00	1.16E+00	2
49	13.504	48.157	2	0.00E+00	0.00E+00	0.00E+00	9.13E+01	0.00E+00	3.99E-01	3.99E-01	2
70	13.49	48.532	18	2.13E+01	0.00E+00	2.13E+01	9.61E+01	0.00E+00	4.20E-01	2.17E+01	5
151	13.525	48.244	2	0.00E+00	0.00E+00	0.00E+00	1.34E+01	0.00E+00	5.86E-02	5.86E-02	1

Sarin (GB) 250kg Bomb
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				12 rounds at aimpoint (10.70, 40.50)							
38	10.93	37.318	2	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.46E-02	1.02E+01	4
40	10.797	37.297	5	9.91E+00	0.00E+00	9.91E+00	9.91E+00	0.00E+00	4.34E-02	9.95E+00	4
43	10.744	37.401	1	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.03E-02	1.16E+01	4
44	10.463	37.339	2	4.11E+00	0.00E+00	4.11E+00	4.11E+00	0.00E+00	1.80E-02	4.13E+00	3
45	10.904	37.401	1	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.08E-02	1.17E+01	4
46	10.857	37.427	1	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.12E-02	1.18E+01	4
47	10.948	37.639	2	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.95E-02	1.37E+01	4
71	10.792	37.756	1	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.44E-02	1.71E+01	5
72	10.794	37.683	1	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.91E-02	1.59E+01	5
73	10.841	37.206	1	9.01E+00	0.00E+00	9.01E+00	9.01E+00	0.00E+00	3.94E-02	9.05E+00	4
130	10.865	37.347	3	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4
131	10.823	37.519	2	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.69E-02	1.31E+01	4
135	10.812	37.913	2	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.58E-02	1.97E+01	5
140	10.945	37.527	2	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
141	10.896	37.67	2	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.69E-02	1.54E+01	5
142	10.87	37.693	2	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.91E-02	1.59E+01	5
157	11.07	37.707	2	9.29E+00	0.00E+00	9.29E+00	9.29E+00	0.00E+00	4.06E-02	9.33E+00	4
180	10.677	38.512	4	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
263	11.107	37.193	2	3.80E+00	0.00E+00	3.80E+00	3.80E+00	0.00E+00	1.66E-02	3.82E+00	3
264	11.055	37.8	6	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.90E-02	1.12E+01	4
265	11.023	37.399	3	8.56E+00	0.00E+00	8.56E+00	8.56E+00	0.00E+00	3.75E-02	8.60E+00	4
266	10.804	37.172	5	8.50E+00	0.00E+00	8.50E+00	8.50E+00	0.00E+00	3.72E-02	8.54E+00	4
267	10.904	37.54	4	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.78E-02	1.33E+01	4
268	10.713	37.514	5	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.64E-02	1.30E+01	4
269	10.804	37.388	2	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.94E-02	1.13E+01	4
270	10.922	37.125	2	7.71E+00	0.00E+00	7.71E+00	7.71E+00	0.00E+00	3.37E-02	7.74E+00	4
273	10.911	37.396	4	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	4.99E-02	1.14E+01	4
274	10.911	37.542	4	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
275	11.07	37.587	4	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.58E-02	8.22E+00	4
276	10.945	37.696	4	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
277	10.726	37.727	1	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.18E-02	1.65E+01	5
278	10.76	37.219	1	9.19E+00	0.00E+00	9.19E+00	9.19E+00	0.00E+00	4.02E-02	9.23E+00	4
279	10.984	37.216	1	7.71E+00	0.00E+00	7.71E+00	7.71E+00	0.00E+00	3.37E-02	7.74E+00	4
280	11.117	37.373	2	4.80E+00	0.00E+00	4.80E+00	4.80E+00	0.00E+00	2.10E-02	4.82E+00	3
281	10.432	37.409	2	3.53E+00	0.00E+00	3.53E+00	3.53E+00	0.00E+00	1.54E-02	3.55E+00	3
282	10.763	37.514	2	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.69E-02	1.31E+01	4

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

284	10.744	37.636	4	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.61E-02	1.52E+01	5
319	10.888	37.255	8	9.57E+00	0.00E+00	9.57E+00	9.57E+00	0.00E+00	4.19E-02	9.61E+00	4
320	10.938	37.62	4	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.95E-02	1.37E+01	4
321	11.039	37.195	1	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.65E-02	6.08E+00	4
322	10.479	37.545	4	6.18E+00	0.00E+00	6.18E+00	6.18E+00	0.00E+00	2.70E-02	6.21E+00	4
323	10.463	37.224	3	3.53E+00	0.00E+00	3.53E+00	3.53E+00	0.00E+00	1.54E-02	3.55E+00	3
324	10.531	37.427	3	7.33E+00	0.00E+00	7.33E+00	7.33E+00	0.00E+00	3.21E-02	7.36E+00	4
325	10.51	37.141	14	4.57E+00	0.00E+00	4.57E+00	4.57E+00	0.00E+00	2.00E-02	4.59E+00	3
Case 2: Protected 12 rounds at aimpoint (10.70, 37.70)											
38	10.93	37.318	2	0.00E+00	0.00E+00	0.00E+00	1.67E+02	0.00E+00	7.31E-01	7.31E-01	2
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	1.37E+02	0.00E+00	5.99E-01	5.99E-01	2
43	10.744	37.401	1	1.30E-01	0.00E+00	1.30E-01	1.67E+02	0.00E+00	7.31E-01	8.61E-01	2
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	3.13E+01	0.00E+00	1.37E-01	1.37E-01	1
45	10.904	37.401	1	8.29E-03	0.00E+00	8.29E-03	1.52E+02	0.00E+00	6.65E-01	6.73E-01	2
46	10.857	37.427	1	2.74E+00	0.00E+00	2.74E+00	1.54E+02	0.00E+00	6.74E-01	3.41E+00	3
47	10.948	37.639	2	2.60E+01	0.00E+00	2.60E+01	4.49E+01	0.00E+00	1.96E-01	2.62E+01	5
72	10.794	37.683	1	8.68E+01	0.00E+00	8.68E+01	1.51E+02	0.00E+00	6.61E-01	8.75E+01	8
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	1.49E+02	0.00E+00	6.52E-01	6.52E-01	2
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	1.72E+02	0.00E+00	7.53E-01	7.53E-01	2
131	10.823	37.519	2	4.71E+01	0.00E+00	4.71E+01	1.47E+02	0.00E+00	6.43E-01	4.77E+01	6
140	10.945	37.527	2	9.13E+01	0.00E+00	9.13E+01	1.62E+02	0.00E+00	7.09E-01	9.20E+01	8
141	10.896	37.67	2	9.61E+01	0.00E+00	9.61E+01	1.62E+02	0.00E+00	7.09E-01	9.68E+01	8
142	10.87	37.693	2	3.99E+01	0.00E+00	3.99E+01	6.99E+01	0.00E+00	3.06E-01	4.02E+01	6
157	11.07	37.707	2	1.62E-01	0.00E+00	1.62E-01	2.89E-01	0.00E+00	1.26E-03	1.63E-01	1
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	3.94E+01	0.00E+00	1.72E-01	1.72E-01	1
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	1.59E+02	0.00E+00	6.96E-01	6.96E-01	2
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	1.19E+02	0.00E+00	5.21E-01	5.21E-01	2
267	10.904	37.54	4	1.31E+01	0.00E+00	1.31E+01	1.34E+02	0.00E+00	5.86E-01	1.37E+01	4
268	10.713	37.514	5	2.75E+01	0.00E+00	2.75E+01	1.43E+02	0.00E+00	6.26E-01	2.81E+01	5
269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	1.51E+02	0.00E+00	6.61E-01	6.61E-01	2
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	1.18E+02	0.00E+00	5.16E-01	5.16E-01	2
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	1.54E+02	0.00E+00	6.74E-01	6.74E-01	2
274	10.911	37.542	4	2.75E+01	0.00E+00	2.75E+01	1.40E+02	0.00E+00	6.13E-01	2.81E+01	5
275	11.07	37.587	4	5.31E+01	0.00E+00	5.31E+01	9.78E+01	0.00E+00	4.28E-01	5.35E+01	7
276	10.945	37.696	4	1.01E+01	0.00E+00	1.01E+01	1.79E+01	0.00E+00	7.83E-02	1.02E+01	4
277	10.726	37.727	1	1.97E+01	0.00E+00	1.97E+01	3.64E+01	0.00E+00	1.59E-01	1.99E+01	5
278	10.76	37.219	1	0.00E+00	0.00E+00	0.00E+00	1.53E+02	0.00E+00	6.69E-01	6.69E-01	2
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	1.34E+02	0.00E+00	5.86E-01	5.86E-01	2
280	11.117	37.373	2	0.00E+00	0.00E+00	0.00E+00	7.51E+00	0.00E+00	3.29E-02	3.29E-02	1
282	10.763	37.514	2	7.25E+01	0.00E+00	7.25E+01	1.52E+02	0.00E+00	6.65E-01	7.32E+01	7
284	10.744	37.636	4	3.58E+01	0.00E+00	3.58E+01	6.23E+01	0.00E+00	2.73E-01	3.61E+01	6
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	1.39E+02	0.00E+00	6.08E-01	6.08E-01	2
320	10.938	37.62	4	7.04E+01	0.00E+00	7.04E+01	1.19E+02	0.00E+00	5.21E-01	7.09E+01	7
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	1.42E+02	0.00E+00	6.21E-01	6.21E-01	2
322	10.479	37.545	4	7.05E+00	0.00E+00	7.05E+00	7.51E+01	0.00E+00	3.29E-01	7.38E+00	4
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	23.78382	0.00E+00	1.04E-01	1.04E-01	1
324	10.531	37.427	3	1.56E+00	0.00E+00	1.56E+00	152.1361	0.00E+00	6.66E-01	2.23E+00	2
325	10.51	37.141	14	0.00E+00	0.00E+00	0.00E+00	77.40948	0.00E+00	3.39E-01	3.39E-01	2

Sarin (GB) 250kg Bomb
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				24 rounds at aimpoint (10.70, 41.90)							
38	10.93	37.318	2	9.55E+00	0.00E+00	9.55E+00	9.55E+00	0.00E+00	4.18E-02	9.59E+00	4
40	10.797	37.297	5	9.78E+00	0.00E+00	9.78E+00	9.78E+00	0.00E+00	4.28E-02	9.82E+00	4
43	10.744	37.401	1	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.90E-02	1.12E+01	4
44	10.463	37.339	2	4.28E+00	0.00E+00	4.28E+00	4.28E+00	0.00E+00	1.87E-02	4.30E+00	3
45	10.904	37.401	1	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4
46	10.857	37.427	1	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.08E-02	1.17E+01	4
47	10.948	37.639	2	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.60E-02	1.29E+01	4
71	10.792	37.756	1	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.35E-02	1.69E+01	5
72	10.794	37.683	1	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.78E-02	1.56E+01	5

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

73	10.841	37.206	1	8.61E+00	0.00E+00	8.61E+00	8.61E+00	0.00E+00	3.77E-02	8.65E+00	4
130	10.865	37.347	3	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.64E-02	1.06E+01	4
131	10.823	37.519	2	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
135	10.812	37.913	2	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.40E-02	1.93E+01	5
140	10.945	37.527	2	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.08E-02	1.17E+01	4
141	10.896	37.67	2	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.43E-02	1.48E+01	4
142	10.87	37.693	2	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.69E-02	1.54E+01	5
157	11.07	37.707	2	9.04E+00	0.00E+00	9.04E+00	9.04E+00	0.00E+00	3.96E-02	9.08E+00	4
180	10.677	38.512	4	2.61E+01	0.00E+00	2.61E+01	2.61E+01	0.00E+00	1.14E-01	2.62E+01	5
263	11.107	37.193	2	3.84E+00	0.00E+00	3.84E+00	3.84E+00	0.00E+00	1.68E-02	3.86E+00	3
264	11.055	37.8	6	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.59E-02	1.05E+01	4
265	11.023	37.399	3	7.93E+00	0.00E+00	7.93E+00	7.93E+00	0.00E+00	3.47E-02	7.96E+00	4
266	10.804	37.172	5	8.09E+00	0.00E+00	8.09E+00	8.09E+00	0.00E+00	3.54E-02	8.13E+00	4
267	10.904	37.54	4	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
268	10.713	37.514	5	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.51E-02	1.27E+01	4
269	10.804	37.388	2	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4
270	10.922	37.125	2	7.23E+00	0.00E+00	7.23E+00	7.23E+00	0.00E+00	3.16E-02	7.26E+00	4
273	10.911	37.396	4	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4
274	10.911	37.542	4	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.51E-02	1.27E+01	4
275	11.07	37.587	4	7.92E+00	0.00E+00	7.92E+00	7.92E+00	0.00E+00	3.47E-02	7.95E+00	4
276	10.945	37.696	4	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.95E-02	1.37E+01	4
277	10.726	37.727	1	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	6.96E-02	1.60E+01	5
278	10.76	37.219	1	8.80E+00	0.00E+00	8.80E+00	8.80E+00	0.00E+00	3.85E-02	8.84E+00	4
279	10.984	37.216	1	7.21E+00	0.00E+00	7.21E+00	7.21E+00	0.00E+00	3.15E-02	7.24E+00	4
280	11.117	37.373	2	4.73E+00	0.00E+00	4.73E+00	4.73E+00	0.00E+00	2.07E-02	4.75E+00	3
281	10.432	37.409	2	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.61E-02	3.70E+00	3
282	10.763	37.514	2	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.69E-02	1.31E+01	4
284	10.744	37.636	4	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.39E-02	1.47E+01	4
319	10.888	37.255	8	9.21E+00	0.00E+00	9.21E+00	9.21E+00	0.00E+00	4.03E-02	9.25E+00	4
320	10.938	37.62	4	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.60E-02	1.29E+01	4
321	11.039	37.195	1	5.77E+00	0.00E+00	5.77E+00	5.77E+00	0.00E+00	2.52E-02	5.80E+00	3
322	10.479	37.545	4	6.09E+00	0.00E+00	6.09E+00	6.09E+00	0.00E+00	2.66E-02	6.12E+00	4
323	10.463	37.224	3	3.50E+00	0.00E+00	3.50E+00	3.50E+00	0.00E+00	1.53E-02	3.52E+00	3
324	10.531	37.427	3	7.07E+00	0.00E+00	7.07E+00	7.07E+00	0.00E+00	3.09E-02	7.10E+00	4
325	10.51	37.141	14	4.28E+00	0.00E+00	4.28E+00	4.28E+00	0.00E+00	1.87E-02	4.30E+00	3

Case 2: Protected 24 rounds at aimpoint (10.50, 37.60)

38	10.93	37.318	2	1.05E-01	0.00E+00	1.05E-01	1.58E+00	0.00E+00	6.91E-03	1.12E-01	1
40	10.797	37.297	5	8.76E+01	0.00E+00	8.76E+01	3.74E+02	0.00E+00	1.64E+00	8.92E+01	8
43	10.744	37.401	1	9.03E+01	0.00E+00	9.03E+01	2.53E+02	0.00E+00	1.11E+00	9.14E+01	8
44	10.463	37.339	2	6.96E+01	0.00E+00	6.96E+01	2.76E+02	0.00E+00	1.21E+00	7.08E+01	7
45	10.904	37.401	1	4.16E-01	0.00E+00	4.16E-01	9.86E-01	0.00E+00	4.31E-03	4.20E-01	2
46	10.857	37.427	1	8.78E+01	0.00E+00	8.78E+01	2.23E+02	0.00E+00	9.76E-01	8.88E+01	8
73	10.841	37.206	1	7.68E+01	0.00E+00	7.68E+01	3.92E+02	0.00E+00	1.72E+00	7.85E+01	8
130	10.865	37.347	3	2.39E+01	0.00E+00	2.39E+01	1.32E+02	0.00E+00	5.78E-01	2.45E+01	5
131	10.823	37.519	2	7.41E+01	0.00E+00	7.41E+01	1.87E+02	0.00E+00	8.18E-01	7.49E+01	7
140	10.945	37.527	2	1.08E-02	0.00E+00	1.08E-02	2.70E-02	0.00E+00	1.18E-04	1.09E-02	1
266	10.804	37.172	5	4.94E+00	0.00E+00	4.94E+00	2.67E+02	0.00E+00	1.17E+00	6.11E+00	4
267	10.904	37.54	4	4.32E-02	0.00E+00	4.32E-02	1.08E-01	0.00E+00	4.73E-04	4.37E-02	1
268	10.713	37.514	5	8.90E+01	0.00E+00	8.90E+01	2.24E+02	0.00E+00	9.80E-01	9.00E+01	8
269	10.804	37.388	2	9.84E+01	0.00E+00	9.84E+01	3.61E+02	0.00E+00	1.58E+00	1.00E+02	8
270	10.922	37.125	2	8.68E-02	0.00E+00	8.68E-02	2.25E+01	0.00E+00	9.84E-02	1.85E-01	1
273	10.911	37.396	4	3.45E-01	0.00E+00	3.45E-01	8.80E-01	0.00E+00	3.85E-03	3.49E-01	2
274	10.911	37.542	4	2.93E-02	0.00E+00	2.93E-02	7.32E-02	0.00E+00	3.20E-04	2.96E-02	1
278	10.76	37.219	1	8.14E+01	0.00E+00	8.14E+01	3.96E+02	0.00E+00	1.73E+00	8.31E+01	8
281	10.432	37.409	2	8.68E+01	0.00E+00	8.68E+01	2.66E+02	0.00E+00	1.16E+00	8.80E+01	8
282	10.763	37.514	2	7.64E+01	0.00E+00	7.64E+01	1.85E+02	0.00E+00	8.09E-01	7.72E+01	8
284	10.744	37.636	4	3.15E+00	0.00E+00	3.15E+00	7.50E+00	0.00E+00	3.28E-02	3.18E+00	3
319	10.888	37.255	8	2.62E+01	0.00E+00	2.62E+01	1.13E+02	0.00E+00	4.94E-01	2.67E+01	5
322	10.479	37.545	4	6.68E+01	0.00E+00	6.68E+01	1.64E+02	0.00E+00	7.18E-01	6.75E+01	7
323	10.463	37.224	3	8.05E+01	0.00E+00	8.05E+01	3.92E+02	0.00E+00	1.72E+00	8.22E+01	8
324	10.531	37.427	3	8.77E+01	0.00E+00	8.77E+01	2.56E+02	0.00E+00	1.12E+00	8.88E+01	8
325	10.51	37.141	14	7.47E+00	0.00E+00	7.47E+00	2.75E+02	0.00E+00	1.20E+00	8.67E+00	4

Sarin (GB) 250kg TBM
Light Attack
Height of Release: 0m

Inhalation	Percutaneous	Total
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Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected 1 round at aimpoint (10.80, 40.50)											
38	10.93	37.318	2	6.81E+00	0.00E+00	6.81E+00	6.81E+00	0.00E+00	2.98E-02	6.84E+00	4
40	10.797	37.297	5	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.82E-02	6.47E+00	4
43	10.744	37.401	1	5.44E+00	0.00E+00	5.44E+00	5.44E+00	0.00E+00	2.38E-02	5.46E+00	3
45	10.904	37.401	1	7.87E+00	0.00E+00	7.87E+00	7.87E+00	0.00E+00	3.44E-02	7.90E+00	4
46	10.857	37.427	1	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
47	10.948	37.639	2	8.56E+00	0.00E+00	8.56E+00	8.56E+00	0.00E+00	3.75E-02	8.60E+00	4
71	10.792	37.756	1	9.19E+00	0.00E+00	9.19E+00	9.19E+00	0.00E+00	4.02E-02	9.23E+00	4
72	10.794	37.683	1	8.80E+00	0.00E+00	8.80E+00	8.80E+00	0.00E+00	3.85E-02	8.84E+00	4
73	10.841	37.206	1	6.97E+00	0.00E+00	6.97E+00	6.97E+00	0.00E+00	3.05E-02	7.00E+00	4
130	10.865	37.347	3	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.35E-02	1.69E+01	5
131	10.823	37.519	2	8.30E+00	0.00E+00	8.30E+00	8.30E+00	0.00E+00	3.63E-02	8.34E+00	4
135	10.812	37.913	2	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4
140	10.945	37.527	2	7.68E+00	0.00E+00	7.68E+00	7.68E+00	0.00E+00	3.36E-02	7.71E+00	4
141	10.896	37.67	2	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
142	10.87	37.693	2	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.09E-01	2.51E+01	5
157	11.07	37.707	2	3.60E+00	0.00E+00	3.60E+00	3.60E+00	0.00E+00	1.58E-02	3.62E+00	3
180	10.677	38.512	4	5.56E+00	0.00E+00	5.56E+00	5.56E+00	0.00E+00	2.43E-02	5.58E+00	3
264	11.055	37.8	6	4.49E+00	0.00E+00	4.49E+00	4.49E+00	0.00E+00	1.96E-02	4.51E+00	3
265	11.023	37.399	3	4.95E+00	0.00E+00	4.95E+00	4.95E+00	0.00E+00	2.17E-02	4.97E+00	3
266	10.804	37.172	5	5.78E+00	0.00E+00	5.78E+00	5.78E+00	0.00E+00	2.53E-02	5.81E+00	3
267	10.904	37.54	4	8.60E+00	0.00E+00	8.60E+00	8.60E+00	0.00E+00	3.76E-02	8.64E+00	4
268	10.713	37.514	5	4.91E+00	0.00E+00	4.91E+00	4.91E+00	0.00E+00	2.15E-02	4.93E+00	3
269	10.804	37.388	2	7.42E+00	0.00E+00	7.42E+00	7.42E+00	0.00E+00	3.25E-02	7.45E+00	4
270	10.922	37.125	2	6.17E+00	0.00E+00	6.17E+00	6.17E+00	0.00E+00	2.70E-02	6.20E+00	4
273	10.911	37.396	4	7.77E+00	0.00E+00	7.77E+00	7.77E+00	0.00E+00	3.40E-02	7.80E+00	4
274	10.911	37.542	4	8.54E+00	0.00E+00	8.54E+00	8.54E+00	0.00E+00	3.74E-02	8.58E+00	4
275	11.07	37.587	4	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.47E-02	3.37E+00	3
276	10.945	37.696	4	8.93E+00	0.00E+00	8.93E+00	8.93E+00	0.00E+00	3.91E-02	8.97E+00	4
277	10.726	37.727	1	6.69E+00	0.00E+00	6.69E+00	6.69E+00	0.00E+00	2.93E-02	6.72E+00	4
278	10.76	37.219	1	5.25E+00	0.00E+00	5.25E+00	5.25E+00	0.00E+00	2.30E-02	5.27E+00	3
279	10.984	37.216	1	5.16E+00	0.00E+00	5.16E+00	5.16E+00	0.00E+00	2.26E-02	5.18E+00	3
282	10.763	37.514	2	6.82E+00	0.00E+00	6.82E+00	6.82E+00	0.00E+00	2.98E-02	6.85E+00	4
284	10.744	37.636	4	6.75E+00	0.00E+00	6.75E+00	6.75E+00	0.00E+00	2.95E-02	6.78E+00	4
319	10.888	37.255	8	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.86E-02	1.35E+01	4
320	10.938	37.62	4	8.63E+00	0.00E+00	8.63E+00	8.63E+00	0.00E+00	3.78E-02	8.67E+00	4
321	11.039	37.195	1	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.37E-02	3.15E+00	3
Case 2: Protected 1 round at aimpoint (13.40, 48.70)											
48	13.452	48.264	1	0.00E+00	0.00E+00	0.00E+00	7.28E+02	0.00E+00	3.19E+00	3.19E+00	3
49	13.504	48.157	2	0.00E+00	0.00E+00	0.00E+00	3.44E+02	0.00E+00	1.51E+00	1.51E+00	2
70	13.49	48.532	18	3.10E+00	0.00E+00	3.10E+00	2.41E+03	0.00E+00	1.05E+01	1.36E+01	4
151	13.525	48.244	2	0.00E+00	0.00E+00	0.00E+00	7.05E+01	0.00E+00	3.08E-01	3.08E-01	2
153	13.54	48.367	4	0.00E+00	0.00E+00	0.00E+00	2.79E+00	0.00E+00	1.22E-02	1.22E-02	1

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				2 rounds at aimpoint (10.60, 42.10)								
38	10.93	37.318	2	5.56E+00	0.00E+00	5.56E+00	5.56E+00	0.00E+00	2.43E-02	5.58E+00	3	
40	10.797	37.297	5	4.89E+00	0.00E+00	4.89E+00	4.89E+00	0.00E+00	2.14E-02	4.91E+00	3	
43	10.744	37.401	1	5.00E+00	0.00E+00	5.00E+00	5.00E+00	0.00E+00	2.19E-02	5.02E+00	3	
44	10.463	37.339	2	5.98E+00	0.00E+00	5.98E+00	5.98E+00	0.00E+00	2.62E-02	6.01E+00	4	
45	10.904	37.401	1	5.25E+00	0.00E+00	5.25E+00	5.25E+00	0.00E+00	2.30E-02	5.27E+00	3	
46	10.857	37.427	1	4.88E+00	0.00E+00	4.88E+00	4.88E+00	0.00E+00	2.14E-02	4.90E+00	3	
47	10.948	37.639	2	6.56E+00	0.00E+00	6.56E+00	6.56E+00	0.00E+00	2.87E-02	6.59E+00	4	
71	10.792	37.756	1	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.73E-02	6.28E+00	4	
72	10.794	37.683	1	6.20E+00	0.00E+00	6.20E+00	6.20E+00	0.00E+00	2.71E-02	6.23E+00	4	
73	10.841	37.206	1	4.12E+00	0.00E+00	4.12E+00	4.12E+00	0.00E+00	1.80E-02	4.14E+00	3	

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

130	10.865	37.347	3	4.59E+00	0.00E+00	4.59E+00	4.59E+00	0.00E+00	2.01E-02	4.61E+00	3
131	10.823	37.519	2	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.37E-02	5.43E+00	3
135	10.812	37.913	2	6.34E+00	0.00E+00	6.34E+00	6.34E+00	0.00E+00	2.77E-02	6.37E+00	4
140	10.945	37.527	2	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.73E-02	6.28E+00	4
141	10.896	37.67	2	5.66E+00	0.00E+00	5.66E+00	5.66E+00	0.00E+00	2.48E-02	5.68E+00	3
142	10.87	37.693	2	5.75E+00	0.00E+00	5.75E+00	5.75E+00	0.00E+00	2.52E-02	5.78E+00	3
157	11.07	37.707	2	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.55E-02	8.16E+00	4
180	10.677	38.512	4	7.16E+00	0.00E+00	7.16E+00	7.16E+00	0.00E+00	3.13E-02	7.19E+00	4
181	11.428	38.418	4	3.10E+00	0.00E+00	3.10E+00	3.10E+00	0.00E+00	1.36E-02	3.11E+00	3
182	10.16	38.142	4	3.13E+00	0.00E+00	3.13E+00	3.13E+00	0.00E+00	1.37E-02	3.14E+00	3
263	11.107	37.193	2	6.58E+00	0.00E+00	6.58E+00	6.58E+00	0.00E+00	2.88E-02	6.61E+00	4
264	11.055	37.8	6	8.38E+00	0.00E+00	8.38E+00	8.38E+00	0.00E+00	3.67E-02	8.42E+00	4
265	11.023	37.399	3	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.03E-02	6.95E+00	4
266	10.804	37.172	5	4.53E+00	0.00E+00	4.53E+00	4.53E+00	0.00E+00	1.98E-02	4.55E+00	3
267	10.904	37.54	4	5.49E+00	0.00E+00	5.49E+00	5.49E+00	0.00E+00	2.40E-02	5.51E+00	3
268	10.713	37.514	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.07E-02	4.76E+00	3
269	10.804	37.388	2	5.09E+00	0.00E+00	5.09E+00	5.09E+00	0.00E+00	2.23E-02	5.11E+00	3
270	10.922	37.125	2	5.10E+00	0.00E+00	5.10E+00	5.10E+00	0.00E+00	2.23E-02	5.12E+00	3
273	10.911	37.396	4	5.37E+00	0.00E+00	5.37E+00	5.37E+00	0.00E+00	2.35E-02	5.39E+00	3
274	10.911	37.542	4	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.46E-02	5.65E+00	3
275	11.07	37.587	4	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.39E-02	7.77E+00	4
276	10.945	37.696	4	6.63E+00	0.00E+00	6.63E+00	6.63E+00	0.00E+00	2.90E-02	6.66E+00	4
277	10.726	37.727	1	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.42E-02	5.56E+00	3
278	10.76	37.219	1	4.55E+00	0.00E+00	4.55E+00	4.55E+00	0.00E+00	1.99E-02	4.57E+00	3
279	10.984	37.216	1	6.12E+00	0.00E+00	6.12E+00	6.12E+00	0.00E+00	2.68E-02	6.15E+00	4
280	11.117	37.373	2	7.16E+00	0.00E+00	7.16E+00	7.16E+00	0.00E+00	3.13E-02	7.19E+00	4
281	10.432	37.409	2	6.17E+00	0.00E+00	6.17E+00	6.17E+00	0.00E+00	2.70E-02	6.20E+00	4
282	10.763	37.514	2	5.45E+00	0.00E+00	5.45E+00	5.45E+00	0.00E+00	2.38E-02	5.47E+00	3
284	10.744	37.636	4	5.78E+00	0.00E+00	5.78E+00	5.78E+00	0.00E+00	2.53E-02	5.81E+00	3
319	10.888	37.255	8	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.07E-02	4.76E+00	3
320	10.938	37.62	4	6.32E+00	0.00E+00	6.32E+00	6.32E+00	0.00E+00	2.77E-02	6.35E+00	4
321	11.039	37.195	1	6.45E+00	0.00E+00	6.45E+00	6.45E+00	0.00E+00	2.82E-02	6.48E+00	4
322	10.479	37.545	4	6.61E+00	0.00E+00	6.61E+00	6.61E+00	0.00E+00	2.89E-02	6.64E+00	4
323	10.463	37.224	3	5.69E+00	0.00E+00	5.69E+00	5.69E+00	0.00E+00	2.49E-02	5.71E+00	3
324	10.531	37.427	3	6.20E+00	0.00E+00	6.20E+00	6.20E+00	0.00E+00	2.71E-02	6.23E+00	4
325	10.51	37.141	14	5.46E+00	0.00E+00	5.46E+00	5.46E+00	0.00E+00	2.39E-02	5.48E+00	3
Case 2: Protected 2 rounds at aimpoint (8.30, 50.80)											
83	8.066	50.692	4	0.00E+00	0.00E+00	0.00E+00	1.19E+00	0.00E+00	5.21E-03	5.21E-03	1
84	8.788	50.504	4	4.71E+02	0.00E+00	4.71E+02	6.10E+03	0.00E+00	2.67E+01	4.98E+02	8
85	8.849	50.506	4	1.86E+01	0.00E+00	1.86E+01	1.64E+02	0.00E+00	7.18E-01	1.93E+01	5
301	8.813	49.005	4	0.00E+00	0.00E+00	0.00E+00	6.26E-02	0.00E+00	2.74E-04	2.74E-04	1
349	8.115	50.67	5	0.00E+00	0.00E+00	0.00E+00	2.54E+02	0.00E+00	1.11E+00	1.11E+00	2

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

				Height of Release: 0m								
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected 4 rounds at aimpoint (11.60, 52.00)												
3	11.844	47.063	4	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.13E-02	1.64E+01	5	
4	11.522	47.053	4	7.80E+00	0.00E+00	7.80E+00	7.80E+00	0.00E+00	3.41E-02	7.83E+00	4	
5	11.662	47.449	4	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.82E-02	1.34E+01	4	
6	11.753	47.449	4	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.09E-02	1.63E+01	5	
7	11.842	47.452	4	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.01E-02	1.84E+01	5	
8	11.915	47.462	4	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.40E-02	1.93E+01	5	
9	11.139	47.431	4	2.53E+00	0.00E+00	2.53E+00	2.53E+00	0.00E+00	1.11E-02	2.54E+00	2	
10	11.045	47.442	4	1.45E+00	0.00E+00	1.45E+00	1.45E+00	0.00E+00	6.34E-03	1.46E+00	2	
11	11.25	47.445	4	3.90E+00	0.00E+00	3.90E+00	3.90E+00	0.00E+00	1.71E-02	3.92E+00	3	
12	11.341	47.435	4	4.91E+00	0.00E+00	4.91E+00	4.91E+00	0.00E+00	2.15E-02	4.93E+00	3	
15	11.948	44.446	3	6.81E+00	0.00E+00	6.81E+00	6.81E+00	0.00E+00	2.98E-02	6.84E+00	4	
16	11.847	44.587	2	6.98E+00	0.00E+00	6.98E+00	6.98E+00	0.00E+00	3.05E-02	7.01E+00	4	
17	11.466	46.869	2	6.31E+00	0.00E+00	6.31E+00	6.31E+00	0.00E+00	2.76E-02	6.34E+00	4	
18	11.521	46.841	2	7.35E+00	0.00E+00	7.35E+00	7.35E+00	0.00E+00	3.22E-02	7.38E+00	4	
32	11.792	44.548	2	6.88E+00	0.00E+00	6.88E+00	6.88E+00	0.00E+00	3.01E-02	6.91E+00	4	

Table D3
GB Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

33	11.948	44.446	1	6.81E+00	0.00E+00	6.81E+00	6.81E+00	0.00E+00	2.98E-02	6.84E+00	4
34	11.896	44.456	2	6.59E+00	0.00E+00	6.59E+00	6.59E+00	0.00E+00	2.88E-02	6.62E+00	4
35	11.755	44.396	2	6.19E+00	0.00E+00	6.19E+00	6.19E+00	0.00E+00	2.71E-02	6.22E+00	4
36	11.773	44.474	1	6.52E+00	0.00E+00	6.52E+00	6.52E+00	0.00E+00	2.85E-02	6.55E+00	4
37	11.849	44.493	2	6.56E+00	0.00E+00	6.56E+00	6.56E+00	0.00E+00	2.87E-02	6.59E+00	4
39	11.857	44.366	2	6.13E+00	0.00E+00	6.13E+00	6.13E+00	0.00E+00	2.68E-02	6.16E+00	4
41	11.94	44.365	2	6.61E+00	0.00E+00	6.61E+00	6.61E+00	0.00E+00	2.89E-02	6.64E+00	4
42	11.953	44.514	2	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.03E-02	6.96E+00	4
50	11.79	47.141	2	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.87E-02	1.58E+01	5
53	11.247	46.908	2	3.35E+00	0.00E+00	3.35E+00	3.35E+00	0.00E+00	1.47E-02	3.36E+00	3
66	11.938	44.438	2	6.75E+00	0.00E+00	6.75E+00	6.75E+00	0.00E+00	2.95E-02	6.78E+00	4
98	12.188	47.396	4	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.08E-02	1.40E+01	4
99	12.24	47.476	4	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.43E-02	1.25E+01	4
100	12.353	47.466	4	7.50E+00	0.00E+00	7.50E+00	7.50E+00	0.00E+00	3.28E-02	7.53E+00	4
101	12.416	47.419	4	4.85E+00	0.00E+00	4.85E+00	4.85E+00	0.00E+00	2.12E-02	4.87E+00	3
112	11.555	50.608	4	5.15E+01	0.00E+00	5.15E+01	5.15E+01	0.00E+00	2.25E-01	5.17E+01	7
113	11.396	50.608	4	5.04E+01	0.00E+00	5.04E+01	5.04E+01	0.00E+00	2.21E-01	5.06E+01	7
114	11.475	50.622	4	6.86E+01	0.00E+00	6.86E+01	6.86E+01	0.00E+00	3.00E-01	6.89E+01	7
115	11.688	50.601	4	8.68E+00	0.00E+00	8.68E+00	8.68E+00	0.00E+00	3.80E-02	8.72E+00	4
124	11.803	44.43	6	6.59E+00	0.00E+00	6.59E+00	6.59E+00	0.00E+00	2.88E-02	6.62E+00	4
125	11.841	44.433	4	6.35E+00	0.00E+00	6.35E+00	6.35E+00	0.00E+00	2.78E-02	6.38E+00	4
136	11.504	46.883	3	6.96E+00	0.00E+00	6.96E+00	6.96E+00	0.00E+00	3.05E-02	6.99E+00	4
137	11.421	46.891	3	5.71E+00	0.00E+00	5.71E+00	5.71E+00	0.00E+00	2.50E-02	5.73E+00	3
144	11.197	46.981	8	3.02E+00	0.00E+00	3.02E+00	3.02E+00	0.00E+00	1.32E-02	3.03E+00	3
145	11.255	47.09	8	3.59E+00	0.00E+00	3.59E+00	3.59E+00	0.00E+00	1.57E-02	3.61E+00	3
146	11.275	46.996	8	3.69E+00	0.00E+00	3.69E+00	3.69E+00	0.00E+00	1.61E-02	3.71E+00	3
161	11.135	47.004	2	2.29E+00	0.00E+00	2.29E+00	2.29E+00	0.00E+00	1.00E-02	2.30E+00	2
167	11.875	44.589	3	6.95E+00	0.00E+00	6.95E+00	6.95E+00	0.00E+00	3.04E-02	6.98E+00	4
255	11.809	47.158	7	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.09E-02	1.63E+01	5
291	11.5	47.434	2	7.93E+00	0.00E+00	7.93E+00	7.93E+00	0.00E+00	3.47E-02	7.96E+00	4
344	12.3	47.428	5	9.76E+00	0.00E+00	9.76E+00	9.76E+00	0.00E+00	4.27E-02	9.80E+00	4
345	12.133	47.423	5	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.87E-02	1.58E+01	5
346	12.468	47.416	5	3.45E+00	0.00E+00	3.45E+00	3.45E+00	0.00E+00	1.51E-02	3.47E+00	3
355	11.345	50.611	5	2.96E+01	0.00E+00	2.96E+01	2.96E+01	0.00E+00	1.30E-01	2.97E+01	5
357	11.624	50.617	5	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.05E-01	2.41E+01	5
358	11.743	50.608	5	2.76E+01	0.00E+00	2.76E+01	2.76E+01	0.00E+00	1.21E-01	2.77E+01	5
Case 2: Protected 4 rounds at aimpoint (8.60, 46.90)											
23	8.542	46.954	2	0.00E+00	0.00E+00	0.00E+00	9.65E+01	0.00E+00	4.22E-01	4.22E-01	2
24	8.524	46.961	2	0.00E+00	0.00E+00	0.00E+00	2.96E+02	0.00E+00	1.30E+00	1.30E+00	2
26	8.467	46.959	2	0.00E+00	0.00E+00	0.00E+00	4.11E+02	0.00E+00	1.80E+00	1.80E+00	2
28	8.488	46.96	2	0.00E+00	0.00E+00	0.00E+00	5.13E+02	0.00E+00	2.24E+00	2.24E+00	2
129	8.527	47.021	8	4.13E+00	0.00E+00	4.13E+00	1.41E+02	0.00E+00	6.17E-01	4.75E+00	3
221	8.456	47.003	4	3.35E-01	0.00E+00	3.35E-01	1.80E+02	0.00E+00	7.88E-01	1.12E+00	2
222	8.469	47.067	4	1.37E+01	0.00E+00	1.37E+01	9.35E+01	0.00E+00	4.09E-01	1.41E+01	4
223	8.521	47.07	4	1.74E+01	0.00E+00	1.74E+01	8.29E+01	0.00E+00	3.63E-01	1.78E+01	5
224	8.494	47.075	4	2.89E+01	0.00E+00	2.89E+01	1.17E+02	0.00E+00	5.12E-01	2.94E+01	5
257	8.424	46.917	2	0.00E+00	0.00E+00	0.00E+00	2.38E+02	0.00E+00	1.04E+00	1.04E+00	2
258	8.403	46.914	2	0.00E+00	0.00E+00	0.00E+00	3.05E+01	0.00E+00	1.33E-01	1.33E-01	1
259	8.572	46.898	3	0.00E+00	0.00E+00	0.00E+00	9.60E-03	0.00E+00	4.20E-05	4.20E-05	1
293	8.543	47.116	5	5.09E+00	0.00E+00	5.09E+00	5.09E+00	0.00E+00	2.23E-02	5.11E+00	3
294	8.467	47.115	5	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.18E-02	1.65E+01	5
295	8.492	47.117	5	3.11E+01	0.00E+00	3.11E+01	3.11E+01	0.00E+00	1.36E-01	3.12E+01	6
296	8.516	47.115	5	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.09E-01	2.51E+01	5

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

VX 152mm Artillery
Light Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				18 rounds at aimpoint (10.80, 38.70)								
38	10.930	37.318	2	8.35E-02	5.36E-01	1.17E-01	8.35E-02	5.36E-01	3.87E+00	3.99E+00	3	
40	10.797	37.297	5	1.95E-01	9.63E-01	2.73E-01	1.95E-01	9.63E-01	7.01E+00	7.29E+00	4	
43	10.744	37.401	1	1.88E-01	1.50E+00	2.63E-01	1.88E-01	1.50E+00	1.08E+01	1.10E+01	4	
45	10.904	37.401	1	1.94E-01	1.57E+00	2.72E-01	1.94E-01	1.57E+00	1.13E+01	1.15E+01	4	
46	10.857	37.427	1	3.17E-01	2.68E+00	4.44E-01	3.17E-01	2.68E+00	1.92E+01	1.96E+01	5	
47	10.948	37.639	2	1.66E-01	1.73E+00	2.32E-01	1.66E-01	1.73E+00	1.23E+01	1.26E+01	4	
71	10.792	37.756	1	8.87E-01	9.60E+00	1.24E+00	8.87E-01	9.60E+00	6.84E+01	6.97E+01	7	
72	10.794	37.683	1	6.69E-01	6.98E+00	9.37E-01	6.69E-01	6.98E+00	4.98E+01	5.07E+01	7	
73	10.841	37.206	1	1.42E-01	2.43E-01	1.99E-01	1.42E-01	2.43E-01	1.90E+00	2.10E+00	2	
130	10.865	37.347	3	2.29E-01	1.51E+00	3.21E-01	2.29E-01	1.51E+00	1.09E+01	1.12E+01	4	
131	10.823	37.519	2	4.32E-01	4.14E+00	6.05E-01	4.32E-01	4.14E+00	2.96E+01	3.02E+01	6	
135	10.812	37.913	2	1.81E+00	2.17E+01	2.53E+00	1.81E+00	2.17E+01	1.54E+02	1.57E+02	8	
140	10.945	37.527	2	1.21E-01	1.30E+00	1.69E-01	1.21E-01	1.30E+00	9.27E+00	9.44E+00	4	
141	10.896	37.670	2	4.41E-01	4.66E+00	6.17E-01	4.41E-01	4.66E+00	3.32E+01	3.39E+01	6	
142	10.870	37.693	2	6.27E-01	6.60E+00	8.78E-01	6.27E-01	6.60E+00	4.71E+01	4.80E+01	6	
180	10.677	38.512	4	1.15E-08	0.00E+00	1.61E-08	1.15E-08	0.00E+00	1.61E-08	3.22E-08	1	
264	11.055	37.800	6	4.07E-07	0.00E+00	5.70E-07	4.07E-07	0.00E+00	5.70E-07	1.14E-06	1	
265	11.023	37.399	3	1.86E-03	1.66E-02	2.60E-03	1.86E-03	1.66E-02	1.19E-01	1.21E-01	1	
266	10.804	37.172	5	1.23E-01	8.23E-02	1.72E-01	1.23E-01	8.23E-02	7.48E-01	9.21E-01	2	
267	10.904	37.540	4	2.66E-01	2.66E+00	3.72E-01	2.66E-01	2.66E+00	1.90E+01	1.94E+01	5	
268	10.713	37.514	5	1.49E-01	1.47E+00	2.09E-01	1.49E-01	1.47E+00	1.05E+01	1.07E+01	4	
269	10.804	37.388	2	2.92E-01	2.24E+00	4.09E-01	2.92E-01	2.24E+00	1.61E+01	1.65E+01	5	
270	10.922	37.125	2	4.15E-02	0.00E+00	5.81E-02	4.15E-02	0.00E+00	5.81E-02	1.16E-01	1	
273	10.911	37.396	4	1.72E-01	1.39E+00	2.41E-01	1.72E-01	1.39E+00	9.97E+00	1.02E+01	4	
274	10.911	37.542	4	2.42E-01	2.45E+00	3.39E-01	2.42E-01	2.45E+00	1.75E+01	1.78E+01	5	
276	10.945	37.696	4	2.06E-01	2.26E+00	2.88E-01	2.06E-01	2.26E+00	1.61E+01	1.64E+01	5	
277	10.726	37.727	1	3.58E-01	3.96E+00	5.01E-01	3.58E-01	3.96E+00	2.82E+01	2.87E+01	5	
278	10.760	37.219	1	1.01E-01	2.00E-01	1.41E-01	1.01E-01	2.00E-01	1.54E+00	1.68E+00	2	
279	10.984	37.216	1	2.54E-03	0.00E+00	3.56E-03	2.54E-03	0.00E+00	3.56E-03	7.11E-03	1	
282	10.763	37.514	2	3.17E-01	3.01E+00	4.44E-01	3.17E-01	3.01E+00	2.15E+01	2.20E+01	5	
284	10.744	37.636	4	3.49E-01	3.64E+00	4.89E-01	3.49E-01	3.64E+00	2.60E+01	2.65E+01	5	
319	10.888	37.255	8	1.14E-01	4.03E-01	1.60E-01	1.14E-01	4.03E-01	2.98E+00	3.14E+00	3	
320	10.938	37.620	4	1.85E-01	2.00E+00	2.59E-01	1.85E-01	2.00E+00	1.43E+01	1.45E+01	4	
Case 2: Protected				18 rounds at aimpoint (10.80, 38.70)								
38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-01	3.49E+00	3.49E+00	3	
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	8.17E-08	8.95E-01	6.27E+00	6.27E+00	4	
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	3.62E-06	1.40E+00	9.80E+00	9.80E+00	4	
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	4.59E-06	1.46E+00	1.02E+01	1.02E+01	4	
46	10.857	37.427	1	0.00E+00	0.00E+00	0.00E+00	3.98E-04	2.49E+00	1.74E+01	1.74E+01	5	
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	4.29E-05	1.61E+00	1.13E+01	1.13E+01	4	
71	10.792	37.756	1	0.00E+00	0.00E+00	0.00E+00	1.85E-03	8.93E+00	6.25E+01	6.25E+01	7	
72	10.794	37.683	1	0.00E+00	0.00E+00	0.00E+00	1.05E-03	6.49E+00	4.54E+01	4.54E+01	6	
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-01	1.58E+00	1.58E+00	2	
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	1.97E-07	1.40E+00	9.80E+00	9.80E+00	4	
131	10.823	37.519	2	0.00E+00	0.00E+00	0.00E+00	5.99E-04	3.85E+00	2.70E+01	2.70E+01	5	
135	10.812	37.913	2	0.00E+00	7.68E-01	0.00E+00	5.34E-03	2.02E+01	1.41E+02	1.41E+02	8	
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E+00	8.47E+00	8.47E+00	4	
141	10.896	37.670	2	0.00E+00	0.00E+00	0.00E+00	6.39E-04	4.34E+00	3.04E+01	3.04E+01	6	
142	10.870	37.693	2	0.00E+00	0.00E+00	0.00E+00	1.15E-03	6.14E+00	4.30E+01	4.30E+01	6	
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-02	1.09E-01	1.09E-01	1	
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-02	5.36E-01	5.36E-01	2	
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	3.44E-04	2.48E+00	1.74E+01	1.74E+01	5	
268	10.713	37.514	5	0.00E+00	0.00E+00	0.00E+00	5.89E-09	1.37E+00	9.59E+00	9.59E+00	4	
269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	3.72E-04	2.08E+00	1.46E+01	1.46E+01	4	
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	1.23E-08	1.30E+00	9.10E+00	9.10E+00	4	
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	2.92E-04	2.28E+00	1.60E+01	1.60E+01	5	
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	1.47E-04	2.10E+00	1.47E+01	1.47E+01	4	

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

277	10.726	37.727	1	0.00E+00	0.00E+00	0.00E+00	5.34E-04	3.68E+00	2.58E+01	2.58E+01	5
278	10.760	37.219	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-01	1.30E+00	1.30E+00	2
282	10.763	37.514	2	0.00E+00	0.00E+00	0.00E+00	4.16E-04	2.80E+00	1.96E+01	1.96E+01	5
284	10.744	37.636	4	0.00E+00	0.00E+00	0.00E+00	4.22E-04	3.39E+00	2.37E+01	2.37E+01	5
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-01	2.63E+00	2.63E+00	2
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	1.32E-04	1.86E+00	1.30E+01	1.30E+01	4

VX MRLS
Moderate Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 240 rounds at aimpoint (10.60, 38.90)											
38	10.930	37.318	2	5.01E-01	2.77E-01	7.01E-01	5.01E-01	2.77E-01	2.64E+00	3.34E+00	3
40	10.797	37.297	5	1.52E+00	1.18E+00	2.13E+00	1.52E+00	1.18E+00	1.04E+01	1.25E+01	4
43	10.744	37.401	1	1.74E+00	1.99E+00	2.44E+00	1.74E+00	1.99E+00	1.64E+01	1.88E+01	5
44	10.463	37.339	2	1.55E+00	1.32E+00	2.17E+00	1.55E+00	1.32E+00	1.14E+01	1.36E+01	4
45	10.904	37.401	1	8.28E-01	8.18E-01	1.16E+00	8.28E-01	8.18E-01	6.89E+00	8.04E+00	4
46	10.857	37.427	1	1.43E+00	1.71E+00	2.00E+00	1.43E+00	1.71E+00	1.40E+01	1.60E+01	5
47	10.948	37.639	2	4.73E-01	9.01E-01	6.62E-01	4.73E-01	9.01E-01	6.97E+00	7.63E+00	4
71	10.792	37.756	1	3.67E+00	1.42E+01	5.14E+00	3.67E+00	1.42E+01	1.05E+02	1.10E+02	8
72	10.794	37.683	1	3.08E+00	9.79E+00	4.31E+00	3.08E+00	9.79E+00	7.28E+01	7.72E+01	8
73	10.841	37.206	1	1.14E+00	4.88E-01	1.60E+00	1.14E+00	4.88E-01	5.01E+00	6.61E+00	4
130	10.865	37.347	3	1.18E+00	9.92E-01	1.65E+00	1.18E+00	9.92E-01	8.60E+00	1.02E+01	4
131	10.823	37.519	2	2.00E+00	3.54E+00	2.80E+00	2.00E+00	3.54E+00	2.76E+01	3.04E+01	6
135	10.812	37.913	2	6.29E+00	3.44E+01	8.81E+00	6.29E+00	3.44E+01	2.50E+02	2.58E+02	8
140	10.945	37.527	2	4.49E-01	5.46E-01	6.29E-01	4.49E-01	5.46E-01	4.45E+00	5.08E+00	3
141	10.896	37.670	2	1.49E+00	3.79E+00	2.09E+00	1.49E+00	3.79E+00	2.86E+01	3.07E+01	6
142	10.870	37.693	2	2.09E+00	6.19E+00	2.93E+00	2.09E+00	6.19E+00	4.63E+01	4.92E+01	6
180	10.677	38.512	4	6.77E+01	1.36E+03	9.48E+01	6.77E+01	1.36E+03	9.61E+03	9.71E+03	8
182	10.160	38.142	4	7.22E-03	0.00E+00	1.01E-02	7.22E-03	0.00E+00	1.01E-02	2.02E-02	1
265	11.023	37.399	3	3.96E-02	0.00E+00	5.54E-02	3.96E-02	0.00E+00	5.54E-02	1.11E-01	1
266	10.804	37.172	5	1.27E+00	4.79E-01	1.78E+00	1.27E+00	4.79E-01	5.13E+00	6.91E+00	4
267	10.904	37.540	4	1.03E+00	1.66E+00	1.44E+00	1.03E+00	1.66E+00	1.31E+01	1.45E+01	4
268	10.713	37.514	5	2.02E+00	3.33E+00	2.83E+00	2.02E+00	3.33E+00	2.61E+01	2.90E+01	5
269	10.804	37.388	2	1.72E+00	1.91E+00	2.41E+00	1.72E+00	1.91E+00	1.58E+01	1.82E+01	5
270	10.922	37.125	2	4.74E-01	8.52E-03	6.64E-01	4.74E-01	8.52E-03	7.23E-01	1.39E+00	2
273	10.911	37.396	4	7.48E-01	7.05E-01	1.05E+00	7.48E-01	7.05E-01	5.98E+00	7.03E+00	4
274	10.911	37.542	4	9.39E-01	1.47E+00	1.31E+00	9.39E-01	1.47E+00	1.16E+01	1.29E+01	4
275	11.070	37.587	4	1.04E-04	0.00E+00	1.46E-04	1.04E-04	0.00E+00	1.46E-04	2.91E-04	1
276	10.945	37.696	4	5.69E-01	1.35E+00	7.97E-01	5.69E-01	1.35E+00	1.02E+01	1.10E+01	4
277	10.726	37.727	1	3.17E+00	1.09E+01	4.44E+00	3.17E+00	1.09E+01	8.07E+01	8.52E+01	8
278	10.760	37.219	1	1.39E+00	7.09E-01	1.95E+00	1.39E+00	7.09E-01	6.91E+00	8.86E+00	4
279	10.984	37.216	1	1.46E-01	0.00E+00	2.04E-01	1.46E-01	0.00E+00	2.04E-01	4.09E-01	2
281	10.432	37.409	2	1.52E+00	1.70E+00	2.13E+00	1.52E+00	1.70E+00	1.40E+01	1.62E+01	5
282	10.763	37.514	2	2.15E+00	3.84E+00	3.01E+00	2.15E+00	3.84E+00	2.99E+01	3.29E+01	6
284	10.744	37.636	4	2.70E+00	7.48E+00	3.78E+00	2.70E+00	7.48E+00	5.61E+01	5.99E+01	7
319	10.888	37.255	8	8.34E-01	4.40E-01	1.17E+00	8.34E-01	4.40E-01	4.25E+00	5.42E+00	3
320	10.938	37.620	4	6.29E-01	1.15E+00	8.81E-01	6.29E-01	1.15E+00	8.93E+00	9.81E+00	4
321	11.039	37.195	1	2.08E-02	0.00E+00	2.91E-02	2.08E-02	0.00E+00	2.91E-02	5.82E-02	1
322	10.479	37.545	4	2.28E+00	4.43E+00	3.19E+00	2.28E+00	4.43E+00	3.42E+01	3.74E+01	6
323	10.463	37.224	3	1.33E+00	6.39E-01	1.86E+00	1.33E+00	6.39E-01	6.34E+00	8.20E+00	4
324	10.531	37.427	3	2.09E+00	2.85E+00	2.93E+00	2.09E+00	2.85E+00	2.29E+01	2.58E+01	5
325	10.510	37.141	14	1.39E+00	4.49E-01	1.95E+00	1.39E+00	4.49E-01	5.09E+00	7.04E+00	4
Case 2: Protected 240 rounds at aimpoint (10.60, 38.90)											
38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	4.50E-01	2.97E-01	2.71E+00	2.71E+00	2
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	1.32E+00	1.25E+00	1.06E+01	1.06E+01	4
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	1.46E+00	2.33E+00	1.84E+01	1.84E+01	5
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	1.30E+00	1.49E+00	1.23E+01	1.23E+01	4
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	7.06E-01	9.47E-01	7.62E+00	7.62E+00	4
46	10.857	37.427	1	0.00E+00	0.00E+00	0.00E+00	1.17E+00	1.99E+00	1.56E+01	1.56E+01	5
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	3.46E-01	1.08E+00	8.04E+00	8.04E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

71	10.792	37.756	1	1.37E-02	0.00E+00	1.92E-02	2.08E+00	1.77E+01	1.27E+02	1.27E+02	8
72	10.794	37.683	1	2.97E-05	0.00E+00	4.16E-05	1.92E+00	1.17E+01	8.46E+01	8.46E+01	8
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	1.00E+00	4.42E-01	4.49E+00	4.49E+00	3
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	1.01E+00	1.09E+00	9.04E+00	9.04E+00	4
131	10.823	37.519	2	0.00E+00	0.00E+00	0.00E+00	1.52E+00	4.23E+00	3.17E+01	3.17E+01	6
135	10.812	37.913	2	6.03E-01	2.08E+00	8.44E-01	3.73E+00	4.45E+01	3.17E+02	3.18E+02	8
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	3.62E-01	6.73E-01	5.22E+00	5.22E+00	3
141	10.896	37.670	2	0.00E+00	0.00E+00	0.00E+00	9.94E-01	4.74E+00	3.46E+01	3.46E+01	6
142	10.870	37.693	2	0.00E+00	0.00E+00	0.00E+00	1.34E+00	7.58E+00	5.49E+01	5.49E+01	7
180	10.677	38.512	4	1.14E+00	4.10E+02	1.60E+00	3.68E+00	1.17E+03	8.20E+03	8.20E+03	8
182	10.160	38.142	4	7.18E-04	0.00E+00	1.01E-03	2.75E-03	0.00E+00	3.85E-03	4.86E-03	1
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	3.51E-02	0.00E+00	4.91E-02	4.91E-02	1
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	1.09E+00	4.37E-01	4.59E+00	4.59E+00	3
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	7.98E-01	1.98E+00	1.50E+01	1.50E+01	4
268	10.713	37.514	5	0.00E+00	0.00E+00	0.00E+00	1.55E+00	4.06E+00	3.06E+01	3.06E+01	6
269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	1.43E+00	2.13E+00	1.69E+01	1.69E+01	5
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	4.14E-01	0.00E+00	5.80E-01	5.80E-01	2
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	6.41E-01	8.11E-01	6.57E+00	6.57E+00	4
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	7.25E-01	1.75E+00	1.33E+01	1.33E+01	4
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	3.89E-01	1.64E+00	1.20E+01	1.20E+01	4
277	10.726	37.727	1	9.14E-04	0.00E+00	1.28E-03	1.85E+00	1.36E+01	9.78E+01	9.78E+01	8
278	10.760	37.219	1	0.00E+00	0.00E+00	0.00E+00	1.20E+00	7.14E-01	6.68E+00	6.68E+00	4
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	1.35E-01	0.00E+00	1.89E-01	1.89E-01	1
281	10.432	37.409	2	0.00E+00	0.00E+00	0.00E+00	1.26E+00	1.94E+00	1.53E+01	1.53E+01	5
282	10.763	37.514	2	0.00E+00	0.00E+00	0.00E+00	1.62E+00	4.70E+00	3.52E+01	3.52E+01	6
284	10.744	37.636	4	0.00E+00	0.00E+00	0.00E+00	1.78E+00	8.84E+00	6.44E+01	6.44E+01	7
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	7.47E-01	3.74E-01	3.66E+00	3.66E+00	3
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	4.60E-01	1.41E+00	1.05E+01	1.05E+01	4
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	1.84E-02	0.00E+00	2.58E-02	2.58E-02	1
322	10.479	37.545	4	0.00E+00	0.00E+00	0.00E+00	1.65E+00	5.57E+00	4.13E+01	4.13E+01	6
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	1.13E+00	6.55E-01	6.17E+00	6.17E+00	4
324	10.531	37.427	3	0.00E+00	0.00E+00	0.00E+00	1.67E+00	3.30E+00	2.54E+01	2.54E+01	5
325	10.510	37.141	14	0.00E+00	0.00E+00	0.00E+00	1.09E+00	4.58E-01	4.73E+00	4.73E+00	3

VX MRLS
Heavy Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				720 rounds at aimpoint (10.55, 39.55)							
38	10.930	37.318	2	2.15E+00	6.76E-01	3.01E+00	2.15E+00	6.76E-01	7.74E+00	1.08E+01	4
40	10.797	37.297	5	2.37E+00	7.88E-01	3.32E+00	2.37E+00	7.88E-01	8.83E+00	1.22E+01	4
43	10.744	37.401	1	2.68E+00	1.47E+00	3.75E+00	2.68E+00	1.47E+00	1.40E+01	1.78E+01	5
44	10.463	37.339	2	2.74E+00	1.27E+00	3.84E+00	2.74E+00	1.27E+00	1.27E+01	1.66E+01	5
45	10.904	37.401	1	2.47E+00	1.17E+00	3.46E+00	2.47E+00	1.17E+00	1.16E+01	1.51E+01	5
46	10.857	37.427	1	2.64E+00	1.57E+00	3.70E+00	2.64E+00	1.57E+00	1.47E+01	1.84E+01	5
47	10.948	37.639	2	3.00E+00	3.67E+00	4.20E+00	3.00E+00	3.67E+00	2.99E+01	3.41E+01	6
71	10.792	37.756	1	3.74E+00	6.92E+00	5.24E+00	3.74E+00	6.92E+00	5.37E+01	5.89E+01	7
72	10.794	37.683	1	3.45E+00	5.05E+00	4.83E+00	3.45E+00	5.05E+00	4.02E+01	4.50E+01	6
73	10.841	37.206	1	2.19E+00	4.48E-01	3.07E+00	2.19E+00	4.48E-01	6.20E+00	9.27E+00	4
130	10.865	37.347	3	2.41E+00	9.61E-01	3.37E+00	2.41E+00	9.61E-01	1.01E+01	1.35E+01	4
131	10.823	37.519	2	2.88E+00	2.48E+00	4.03E+00	2.88E+00	2.48E+00	2.14E+01	2.54E+01	5
135	10.812	37.913	2	4.72E+00	1.33E+01	6.61E+00	4.72E+00	1.33E+01	9.97E+01	1.06E+02	8
140	10.945	37.527	2	2.58E+00	2.09E+00	3.61E+00	2.58E+00	2.09E+00	1.82E+01	2.19E+01	5
141	10.896	37.670	2	3.43E+00	4.58E+00	4.80E+00	3.43E+00	4.58E+00	3.69E+01	4.17E+01	6
142	10.870	37.693	2	3.62E+00	5.43E+00	5.07E+00	3.62E+00	5.43E+00	4.31E+01	4.81E+01	6
157	11.070	37.707	2	1.32E+00	1.54E+00	1.85E+00	1.32E+00	1.54E+00	1.26E+01	1.45E+01	4
180	10.677	38.512	4	5.16E+01	1.10E+03	7.22E+01	5.16E+01	1.10E+03	7.77E+03	7.84E+03	8
182	10.160	38.142	4	5.82E+00	2.72E+01	8.15E+00	5.82E+00	2.72E+01	1.99E+02	2.07E+02	8
263	11.107	37.193	2	5.46E-01	0.00E+00	7.64E-01	5.46E-01	0.00E+00	7.64E-01	1.53E+00	2
264	11.055	37.800	6	1.79E+00	2.93E+00	2.51E+00	1.79E+00	2.93E+00	2.30E+01	2.55E+01	5
265	11.023	37.399	3	1.45E+00	4.34E-01	2.03E+00	1.45E+00	4.34E-01	5.07E+00	7.10E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

266	10.804	37.172	5	2.15E+00	3.48E-01	3.01E+00	2.15E+00	3.48E-01	5.45E+00	8.46E+00	4
267	10.904	37.540	4	2.85E+00	2.41E+00	3.99E+00	2.85E+00	2.41E+00	2.09E+01	2.49E+01	5
268	10.713	37.514	5	3.15E+00	2.82E+00	4.41E+00	3.15E+00	2.82E+00	2.42E+01	2.86E+01	5
269	10.804	37.388	2	2.54E+00	1.27E+00	3.56E+00	2.54E+00	1.27E+00	1.24E+01	1.60E+01	5
270	10.922	37.125	2	1.86E+00	1.34E-01	2.60E+00	1.86E+00	1.34E-01	3.54E+00	6.15E+00	4
273	10.911	37.396	4	2.42E+00	1.13E+00	3.39E+00	2.42E+00	1.13E+00	1.13E+01	1.47E+01	4
274	10.911	37.542	4	2.81E+00	2.40E+00	3.93E+00	2.81E+00	2.40E+00	2.07E+01	2.47E+01	5
275	11.070	37.587	4	1.14E+00	8.26E-01	1.60E+00	1.14E+00	8.26E-01	7.38E+00	8.97E+00	4
276	10.945	37.696	4	3.25E+00	4.71E+00	4.55E+00	3.25E+00	4.71E+00	3.75E+01	4.21E+01	6
277	10.726	37.727	1	3.98E+00	7.33E+00	5.57E+00	3.98E+00	7.33E+00	5.69E+01	6.25E+01	7
278	10.760	37.219	1	2.30E+00	5.16E-01	3.22E+00	2.30E+00	5.16E-01	6.83E+00	1.01E+01	4
279	10.984	37.216	1	1.60E+00	1.89E-01	2.24E+00	1.60E+00	1.89E-01	3.56E+00	5.80E+00	3
280	11.117	37.373	2	5.16E-01	3.43E-02	7.22E-01	5.16E-01	3.43E-02	9.63E-01	1.68E+00	2
281	10.432	37.409	2	2.87E+00	1.63E+00	4.02E+00	2.87E+00	1.63E+00	1.54E+01	1.94E+01	5
282	10.763	37.514	2	2.93E+00	2.53E+00	4.10E+00	2.93E+00	2.53E+00	2.18E+01	2.59E+01	5
284	10.744	37.636	4	3.44E+00	4.67E+00	4.82E+00	3.44E+00	4.67E+00	3.75E+01	4.23E+01	6
319	10.888	37.255	8	2.20E+00	4.95E-01	3.08E+00	2.20E+00	4.95E-01	6.55E+00	9.63E+00	4
320	10.938	37.620	4	2.98E+00	3.40E+00	4.17E+00	2.98E+00	3.40E+00	2.80E+01	3.21E+01	6
321	11.039	37.195	1	1.10E+00	2.10E-02	1.54E+00	1.10E+00	2.10E-02	1.69E+00	3.23E+00	3
322	10.479	37.545	4	3.43E+00	3.83E+00	4.80E+00	3.43E+00	3.83E+00	3.16E+01	3.64E+01	6
323	10.463	37.224	3	2.53E+00	6.49E-01	3.54E+00	2.53E+00	6.49E-01	8.09E+00	1.16E+01	4
324	10.531	37.427	3	3.34E+00	2.68E+00	4.68E+00	3.34E+00	2.68E+00	2.34E+01	2.81E+01	5
325	10.510	37.141	14	2.51E+00	5.80E-01	3.51E+00	2.51E+00	5.80E-01	7.57E+00	1.11E+01	4

Case 2: Protected 720 rounds at aimpoint (10.55, 39.55)

38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	4.34E-01	4.27E-01	3.60E+00	3.60E+00	3
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	5.95E-01	1.42E+00	1.08E+01	1.08E+01	4
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	6.65E-01	2.80E+00	2.05E+01	2.05E+01	5
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	8.44E-01	2.63E+00	1.96E+01	1.96E+01	5
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	5.98E-01	1.24E+00	9.52E+00	9.52E+00	4
46	10.857	37.427	1	0.00E+00	0.00E+00	0.00E+00	7.21E-01	2.23E+00	1.66E+01	1.66E+01	5
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	8.26E-01	3.41E+00	2.50E+01	2.50E+01	5
71	10.792	37.756	1	8.55E-03	9.53E-04	1.20E-02	1.86E+00	2.59E+01	1.84E+02	1.84E+02	8
72	10.794	37.683	1	1.99E-03	0.00E+00	2.79E-03	1.60E+00	1.64E+01	1.17E+02	1.17E+02	8
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	4.35E-01	4.66E-01	3.87E+00	3.87E+00	3
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	5.56E-01	1.26E+00	9.60E+00	9.60E+00	4
131	10.823	37.519	2	0.00E+00	0.00E+00	0.00E+00	9.78E-01	5.19E+00	3.77E+01	3.77E+01	6
135	10.812	37.913	2	1.23E-01	9.69E-02	1.72E-01	2.61E+00	1.21E+02	8.51E+02	8.51E+02	8
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	6.86E-01	1.99E+00	1.49E+01	1.49E+01	4
141	10.896	37.670	2	0.00E+00	0.00E+00	0.00E+00	1.26E+00	8.93E+00	6.43E+01	6.43E+01	7
142	10.870	37.693	2	0.00E+00	0.00E+00	0.00E+00	1.34E+00	1.07E+01	7.68E+01	7.68E+01	8
157	11.070	37.707	2	0.00E+00	0.00E+00	0.00E+00	2.74E-01	8.65E-01	6.44E+00	6.44E+00	4
180	10.677	38.512	4	1.68E-01	1.03E+00	2.35E-01	1.69E+00	5.79E+02	4.06E+03	4.06E+03	8
182	10.160	38.142	4	1.44E-01	1.60E-01	2.02E-01	1.67E+00	3.09E+02	2.17E+03	2.17E+03	8
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	2.48E-02	0.00E+00	3.47E-02	3.47E-02	1
264	11.055	37.800	6	1.37E-03	0.00E+00	1.92E-03	4.10E-01	2.41E+00	1.74E+01	1.74E+01	5
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	3.29E-01	2.86E-01	2.46E+00	2.46E+00	2
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	4.38E-01	3.28E-01	2.91E+00	2.91E+00	2
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	8.68E-01	2.90E+00	2.15E+01	2.15E+01	5
268	10.713	37.514	5	0.00E+00	0.00E+00	0.00E+00	7.50E-01	3.25E+00	2.38E+01	2.38E+01	5
269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	7.41E-01	2.43E+00	1.80E+01	1.80E+01	5
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	2.47E-01	0.00E+00	3.46E-01	3.46E-01	2
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	5.75E-01	1.13E+00	8.72E+00	8.72E+00	4
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	8.43E-01	2.78E+00	2.06E+01	2.06E+01	5
275	11.070	37.587	4	0.00E+00	0.00E+00	0.00E+00	2.29E-01	4.12E-01	3.20E+00	3.20E+00	3
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	9.31E-01	5.22E+00	3.78E+01	3.78E+01	6
277	10.726	37.727	1	1.13E-02	0.00E+00	1.58E-02	1.13E+00	1.20E+01	8.56E+01	8.56E+01	8
278	10.760	37.219	1	0.00E+00	0.00E+00	0.00E+00	4.58E-01	6.04E-01	4.87E+00	4.87E+00	3
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	2.50E-01	3.88E-02	6.22E-01	6.22E-01	2
280	11.117	37.373	2	0.00E+00	0.00E+00	0.00E+00	4.12E-02	0.00E+00	5.77E-02	5.77E-02	1
281	10.432	37.409	2	0.00E+00	0.00E+00	0.00E+00	9.47E-01	4.45E+00	3.25E+01	3.25E+01	6
282	10.763	37.514	2	0.00E+00	0.00E+00	0.00E+00	9.05E-01	5.52E+00	3.99E+01	3.99E+01	6
284	10.744	37.636	4	5.91E-03	0.00E+00	8.27E-03	1.05E+00	8.77E+00	6.29E+01	6.29E+01	7
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	4.21E-01	3.98E-01	3.38E+00	3.38E+00	3
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	8.64E-01	3.67E+00	2.69E+01	2.69E+01	5
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	1.23E-01	0.00E+00	1.72E-01	1.72E-01	1
322	10.479	37.545	4	0.00E+00	0.00E+00	0.00E+00	1.24E+00	9.14E+00	6.57E+01	6.57E+01	7
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	5.69E-01	9.19E-01	7.23E+00	7.23E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

324	10.531	37.427	3	0.00E+00	0.00E+00	0.00E+00	8.64E-01	2.76E+00	2.05E+01	2.05E+01	5
325	10.510	37.141	14	0.00E+00	0.00E+00	0.00E+00	3.88E-01	5.16E-01	4.16E+00	4.16E+00	3

VX 250kg Bomb
Light Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected **2 rounds at aimpoint (10.70, 40.30)**

38	10.930	37.318	2	5.09E-02	6.38E-01	7.13E-02	5.09E-02	6.38E-01	4.54E+00	4.61E+00	3
40	10.797	37.297	5	7.74E-02	1.01E+00	1.08E-01	7.74E-02	1.01E+00	7.18E+00	7.29E+00	4
43	10.744	37.401	1	3.14E-02	3.68E-01	4.40E-02	3.14E-02	3.68E-01	2.62E+00	2.66E+00	2
44	10.463	37.339	2	3.72E-06	7.90E-02	5.21E-06	3.72E-06	7.90E-02	5.53E-01	5.53E-01	2
45	10.904	37.401	1	9.27E-02	1.13E+00	1.30E-01	9.27E-02	1.13E+00	8.04E+00	8.17E+00	4
46	10.857	37.427	1	1.47E-01	1.78E+00	2.06E-01	1.47E-01	1.78E+00	1.27E+01	1.29E+01	4
47	10.948	37.639	2	3.46E-02	4.84E-01	4.84E-02	3.46E-02	4.84E-01	3.44E+00	3.48E+00	3
71	10.792	37.756	1	1.41E-01	1.85E+00	1.97E-01	1.41E-01	1.85E+00	1.31E+01	1.33E+01	4
72	10.794	37.683	1	1.34E-01	1.71E+00	1.88E-01	1.34E-01	1.71E+00	1.22E+01	1.23E+01	4
73	10.841	37.206	1	1.08E-01	1.29E+00	1.51E-01	1.08E-01	1.29E+00	9.18E+00	9.33E+00	4
130	10.865	37.347	3	1.26E-01	1.52E+00	1.76E-01	1.26E-01	1.52E+00	1.08E+01	1.10E+01	4
131	10.823	37.519	2	1.55E-01	1.89E+00	2.17E-01	1.55E-01	1.89E+00	1.34E+01	1.37E+01	4
135	10.812	37.913	2	2.60E-01	3.59E+00	3.64E-01	2.60E-01	3.59E+00	2.55E+01	2.59E+01	5
140	10.945	37.527	2	3.10E-02	4.87E-01	4.34E-02	3.10E-02	4.87E-01	3.45E+00	3.50E+00	3
141	10.896	37.670	2	1.56E-01	2.00E+00	2.18E-01	1.56E-01	2.00E+00	1.42E+01	1.44E+01	4
142	10.870	37.693	2	2.21E-01	2.85E+00	3.09E-01	2.21E-01	2.85E+00	2.03E+01	2.06E+01	5
180	10.677	38.512	4	8.03E-02	1.23E+00	1.12E-01	8.03E-02	1.23E+00	8.72E+00	8.83E+00	4
266	10.804	37.172	5	8.91E-02	9.86E-01	1.25E-01	8.91E-02	9.86E-01	7.03E+00	7.15E+00	4
267	10.904	37.540	4	1.16E-01	1.38E+00	1.62E-01	1.16E-01	1.38E+00	9.82E+00	9.98E+00	4
268	10.713	37.514	5	2.63E-02	3.61E-01	3.68E-02	2.63E-02	3.61E-01	2.56E+00	2.60E+00	2
269	10.804	37.388	2	1.02E-01	1.25E+00	1.43E-01	1.02E-01	1.25E+00	8.89E+00	9.04E+00	4
270	10.922	37.125	2	5.77E-02	6.47E-01	8.08E-02	5.77E-02	6.47E-01	4.61E+00	4.69E+00	3
273	10.911	37.396	4	8.20E-02	1.00E+00	1.15E-01	8.20E-02	1.00E+00	7.11E+00	7.23E+00	4
274	10.911	37.542	4	1.02E-01	1.22E+00	1.43E-01	1.02E-01	1.22E+00	8.68E+00	8.83E+00	4
276	10.945	37.696	4	4.61E-02	5.83E-01	6.45E-02	4.61E-02	5.83E-01	4.15E+00	4.21E+00	3
277	10.726	37.727	1	1.62E-02	2.46E-01	2.27E-02	1.62E-02	2.46E-01	1.74E+00	1.77E+00	2
278	10.760	37.219	1	4.28E-02	4.96E-01	5.99E-02	4.28E-02	4.96E-01	3.53E+00	3.59E+00	3
279	10.984	37.216	1	7.65E-06	6.91E-02	1.07E-05	7.65E-06	6.91E-02	4.84E-01	4.84E-01	2
282	10.763	37.514	2	5.50E-02	6.33E-01	7.70E-02	5.50E-02	6.33E-01	4.51E+00	4.59E+00	3
284	10.744	37.636	4	3.14E-02	4.06E-01	4.40E-02	3.14E-02	4.06E-01	2.89E+00	2.93E+00	2
319	10.888	37.255	8	9.66E-02	1.15E+00	1.35E-01	9.66E-02	1.15E+00	8.19E+00	8.32E+00	4
320	10.938	37.620	4	5.43E-02	6.90E-01	7.60E-02	5.43E-02	6.90E-01	4.91E+00	4.98E+00	3
322	10.479	37.545	4	5.72E-03	2.02E-01	8.01E-03	5.72E-03	2.02E-01	1.42E+00	1.43E+00	2
323	10.463	37.224	3	3.10E-06	7.31E-02	4.34E-06	3.10E-06	7.31E-02	5.12E-01	5.12E-01	2
324	10.531	37.427	3	7.40E-02	9.34E-01	1.04E-01	7.40E-02	9.34E-01	6.64E+00	6.75E+00	4
325	10.510	37.141	14	3.21E-02	4.31E-01	4.49E-02	3.21E-02	4.31E-01	3.06E+00	3.11E+00	3

Case 2: Protected **2 rounds at aimpoint (10.70, 40.30)**

38	10.930	37.318	2	0.00E+00	4.36E-02	0.00E+00	0.00E+00	5.97E-01	4.18E+00	4.18E+00	3
40	10.797	37.297	5	0.00E+00	6.61E-02	0.00E+00	0.00E+00	9.39E-01	6.57E+00	6.57E+00	4
43	10.744	37.401	1	0.00E+00	3.94E-02	0.00E+00	0.00E+00	3.45E-01	2.42E+00	2.42E+00	2
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-02	5.15E-01	5.15E-01	2
45	10.904	37.401	1	0.00E+00	1.74E-01	0.00E+00	0.00E+00	1.07E+00	7.49E+00	7.49E+00	4
46	10.857	37.427	1	0.00E+00	3.24E-01	0.00E+00	0.00E+00	1.68E+00	1.18E+01	1.18E+01	4
47	10.948	37.639	2	0.00E+00	1.35E-01	0.00E+00	0.00E+00	4.59E-01	3.21E+00	3.21E+00	3
71	10.792	37.756	1	0.00E+00	5.75E-01	0.00E+00	0.00E+00	1.76E+00	1.23E+01	1.23E+01	4
72	10.794	37.683	1	0.00E+00	5.12E-01	0.00E+00	0.00E+00	1.63E+00	1.14E+01	1.14E+01	4
73	10.841	37.206	1	0.00E+00	5.43E-02	0.00E+00	0.00E+00	1.20E+00	8.40E+00	8.40E+00	4
130	10.865	37.347	3	0.00E+00	1.79E-01	0.00E+00	0.00E+00	1.42E+00	9.94E+00	9.94E+00	4
131	10.823	37.519	2	0.00E+00	4.49E-01	0.00E+00	0.00E+00	1.79E+00	1.25E+01	1.25E+01	4
135	10.812	37.913	2	0.00E+00	1.16E+00	0.00E+00	0.00E+00	3.42E+00	2.39E+01	2.39E+01	5
140	10.945	37.527	2	0.00E+00	1.10E-01	0.00E+00	0.00E+00	4.60E-01	3.22E+00	3.22E+00	3
141	10.896	37.670	2	0.00E+00	5.94E-01	0.00E+00	0.00E+00	1.91E+00	1.34E+01	1.34E+01	4
142	10.870	37.693	2	0.00E+00	8.73E-01	0.00E+00	0.00E+00	2.71E+00	1.90E+01	1.90E+01	5
180	10.677	38.512	4	0.00E+00	4.06E-01	0.00E+00	0.00E+00	1.17E+00	8.19E+00	8.19E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

266	10.804	37.172	5	0.00E+00	2.69E-02	0.00E+00	0.00E+00	9.19E-01	6.43E+00	6.43E+00	4
267	10.904	37.540	4	0.00E+00	3.35E-01	0.00E+00	0.00E+00	1.31E+00	9.17E+00	9.17E+00	4
268	10.713	37.514	5	0.00E+00	7.24E-02	0.00E+00	0.00E+00	3.41E-01	2.39E+00	2.39E+00	2
269	10.804	37.388	2	0.00E+00	1.82E-01	0.00E+00	0.00E+00	1.17E+00	8.19E+00	8.19E+00	4
270	10.922	37.125	2	0.00E+00	5.53E-03	0.00E+00	0.00E+00	6.02E-01	4.21E+00	4.21E+00	3
273	10.911	37.396	4	0.00E+00	1.47E-01	0.00E+00	0.00E+00	9.44E-01	6.61E+00	6.61E+00	4
274	10.911	37.542	4	0.00E+00	2.94E-01	0.00E+00	0.00E+00	1.15E+00	8.05E+00	8.05E+00	4
276	10.945	37.696	4	0.00E+00	1.76E-01	0.00E+00	0.00E+00	5.54E-01	3.88E+00	3.88E+00	3
277	10.726	37.727	1	0.00E+00	7.86E-02	0.00E+00	0.00E+00	2.34E-01	1.64E+00	1.64E+00	2
278	10.760	37.219	1	0.00E+00	9.68E-03	0.00E+00	0.00E+00	4.62E-01	3.23E+00	3.23E+00	3
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-02	4.50E-01	4.50E-01	2
282	10.763	37.514	2	0.00E+00	1.38E-01	0.00E+00	0.00E+00	5.99E-01	4.19E+00	4.19E+00	3
284	10.744	37.636	4	0.00E+00	1.12E-01	0.00E+00	0.00E+00	3.86E-01	2.70E+00	2.70E+00	2
319	10.888	37.255	8	0.00E+00	6.42E-02	0.00E+00	0.00E+00	1.07E+00	7.49E+00	7.49E+00	4
320	10.938	37.620	4	0.00E+00	1.88E-01	0.00E+00	0.00E+00	6.55E-01	4.59E+00	4.59E+00	3
322	10.479	37.545	4	0.00E+00	2.23E-02	0.00E+00	0.00E+00	1.90E-01	1.33E+00	1.33E+00	2
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-02	4.76E-01	4.76E-01	2
324	10.531	37.427	3	0.00E+00	1.46E-01	0.00E+00	0.00E+00	8.79E-01	6.15E+00	6.15E+00	4
325	10.510	37.141	14	0.00E+00	3.36E-03	0.00E+00	0.00E+00	4.01E-01	2.81E+00	2.81E+00	2

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				12 rounds at aimpoint (10.70, 41.10)								
38	10.930	37.318	2	6.18E-01	1.54E+00	8.65E-01	6.18E-01	1.54E+00	1.16E+01	1.25E+01	4	
40	10.797	37.297	5	6.02E-01	1.50E+00	8.43E-01	6.02E-01	1.50E+00	1.13E+01	1.22E+01	4	
43	10.744	37.401	1	6.74E-01	1.82E+00	9.44E-01	6.74E-01	1.82E+00	1.37E+01	1.46E+01	4	
44	10.463	37.339	2	2.52E-01	6.61E-01	3.53E-01	2.52E-01	6.61E-01	4.98E+00	5.33E+00	3	
45	10.904	37.401	1	6.91E-01	1.86E+00	9.67E-01	6.91E-01	1.86E+00	1.40E+01	1.50E+01	4	
46	10.857	37.427	1	6.84E-01	1.92E+00	9.58E-01	6.84E-01	1.92E+00	1.44E+01	1.54E+01	5	
47	10.948	37.639	2	8.56E-01	2.81E+00	1.20E+00	8.56E-01	2.81E+00	2.09E+01	2.21E+01	5	
71	10.792	37.756	1	8.99E-01	3.29E+00	1.26E+00	8.99E-01	3.29E+00	2.43E+01	2.55E+01	5	
72	10.794	37.683	1	8.71E-01	2.99E+00	1.22E+00	8.71E-01	2.99E+00	2.21E+01	2.34E+01	5	
73	10.841	37.206	1	5.40E-01	1.29E+00	7.56E-01	5.40E-01	1.29E+00	9.79E+00	1.05E+01	4	
130	10.865	37.347	3	6.34E-01	1.64E+00	8.88E-01	6.34E-01	1.64E+00	1.24E+01	1.33E+01	4	
131	10.823	37.519	2	7.68E-01	2.28E+00	1.08E+00	7.68E-01	2.28E+00	1.70E+01	1.81E+01	5	
135	10.812	37.913	2	9.58E-01	3.89E+00	1.34E+00	9.58E-01	3.89E+00	2.86E+01	2.99E+01	5	
140	10.945	37.527	2	7.70E-01	2.30E+00	1.08E+00	7.70E-01	2.30E+00	1.72E+01	1.83E+01	5	
141	10.896	37.670	2	8.70E-01	2.95E+00	1.22E+00	8.70E-01	2.95E+00	2.19E+01	2.31E+01	5	
142	10.870	37.693	2	8.91E-01	3.06E+00	1.25E+00	8.91E-01	3.06E+00	2.27E+01	2.39E+01	5	
157	11.070	37.707	2	4.82E-01	1.71E+00	6.75E-01	4.82E-01	1.71E+00	1.26E+01	1.33E+01	4	
180	10.677	38.512	4	1.39E+00	9.09E+00	1.95E+00	1.39E+00	9.09E+00	6.56E+01	6.75E+01	7	
263	11.107	37.193	2	1.40E-01	4.28E-01	1.96E-01	1.40E-01	4.28E-01	3.19E+00	3.39E+00	3	
264	11.055	37.800	6	6.25E-01	2.23E+00	8.75E-01	6.25E-01	2.23E+00	1.65E+01	1.74E+01	5	
265	11.023	37.399	3	5.89E-01	1.46E+00	8.25E-01	5.89E-01	1.46E+00	1.10E+01	1.19E+01	4	
266	10.804	37.172	5	5.27E-01	1.22E+00	7.38E-01	5.27E-01	1.22E+00	9.28E+00	1.00E+01	4	
267	10.904	37.540	4	7.91E-01	2.37E+00	1.11E+00	7.91E-01	2.37E+00	1.77E+01	1.88E+01	5	
268	10.713	37.514	5	7.65E-01	2.26E+00	1.07E+00	7.65E-01	2.26E+00	1.69E+01	1.80E+01	5	
269	10.804	37.388	2	6.78E-01	1.81E+00	9.49E-01	6.78E-01	1.81E+00	1.36E+01	1.46E+01	4	
270	10.922	37.125	2	4.94E-01	1.13E+00	6.92E-01	4.94E-01	1.13E+00	8.60E+00	9.29E+00	4	
273	10.911	37.396	4	6.84E-01	1.83E+00	9.58E-01	6.84E-01	1.83E+00	1.38E+01	1.47E+01	4	
274	10.911	37.542	4	7.90E-01	2.38E+00	1.11E+00	7.90E-01	2.38E+00	1.78E+01	1.89E+01	5	
275	11.070	37.587	4	4.54E-01	1.42E+00	6.36E-01	4.54E-01	1.42E+00	1.06E+01	1.12E+01	4	
276	10.945	37.696	4	8.98E-01	3.07E+00	1.26E+00	8.98E-01	3.07E+00	2.27E+01	2.40E+01	5	
277	10.726	37.727	1	8.96E-01	3.18E+00	1.25E+00	8.96E-01	3.18E+00	2.35E+01	2.48E+01	5	
278	10.760	37.219	1	5.42E-01	1.31E+00	7.59E-01	5.42E-01	1.31E+00	9.93E+00	1.07E+01	4	
279	10.984	37.216	1	5.43E-01	1.22E+00	7.60E-01	5.43E-01	1.22E+00	9.30E+00	1.01E+01	4	
280	11.117	37.373	2	1.44E-01	5.01E-01	2.02E-01	1.44E-01	5.01E-01	3.71E+00	3.91E+00	3	
281	10.432	37.409	2	1.30E-01	4.65E-01	1.82E-01	1.30E-01	4.65E-01	3.44E+00	3.62E+00	3	
282	10.763	37.514	2	7.65E-01	2.25E+00	1.07E+00	7.65E-01	2.25E+00	1.68E+01	1.79E+01	5	

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

284	10.744	37.636	4	8.45E-01	2.80E+00	1.18E+00	8.45E-01	2.80E+00	2.08E+01	2.20E+01	5
319	10.888	37.255	8	5.83E-01	1.40E+00	8.16E-01	5.83E-01	1.40E+00	1.06E+01	1.14E+01	4
320	10.938	37.620	4	8.41E-01	2.73E+00	1.18E+00	8.41E-01	2.73E+00	2.03E+01	2.15E+01	5
321	11.039	37.195	1	4.20E-01	9.02E-01	5.88E-01	4.20E-01	9.02E-01	6.90E+00	7.49E+00	4
322	10.479	37.545	4	4.08E-01	1.21E+00	5.71E-01	4.08E-01	1.21E+00	9.04E+00	9.61E+00	4
323	10.463	37.224	3	2.16E-01	5.50E-01	3.02E-01	2.16E-01	5.50E-01	4.15E+00	4.45E+00	3
324	10.531	37.427	3	6.02E-01	1.51E+00	8.43E-01	6.02E-01	1.51E+00	1.14E+01	1.23E+01	4
325	10.510	37.141	14	3.85E-01	7.89E-01	5.39E-01	3.85E-01	7.89E-01	6.06E+00	6.60E+00	4

Case 2: Protected 12 rounds at aimpoint (10.70, 41.10)

38	10.930	37.318	2	7.23E-04	0.00E+00	1.01E-03	4.28E-01	1.44E+00	1.07E+01	1.07E+01	4
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	4.19E-01	1.39E+00	1.03E+01	1.03E+01	4
43	10.744	37.401	1	5.58E-03	0.00E+00	7.81E-03	4.56E-01	1.70E+00	1.25E+01	1.25E+01	4
44	10.463	37.339	2	4.21E-04	0.00E+00	5.89E-04	1.69E-01	6.15E-01	4.54E+00	4.54E+00	3
45	10.904	37.401	1	4.68E-03	0.00E+00	6.55E-03	4.72E-01	1.73E+00	1.28E+01	1.28E+01	4
46	10.857	37.427	1	4.86E-03	0.00E+00	6.80E-03	4.58E-01	1.79E+00	1.32E+01	1.32E+01	4
47	10.948	37.639	2	4.74E-02	0.00E+00	6.64E-02	5.46E-01	2.62E+00	1.91E+01	1.92E+01	5
71	10.792	37.756	1	9.25E-02	1.31E-02	1.30E-01	5.54E-01	3.06E+00	2.22E+01	2.23E+01	5
72	10.794	37.683	1	6.94E-02	0.00E+00	9.72E-02	5.45E-01	2.78E+00	2.02E+01	2.03E+01	5
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	3.78E-01	1.20E+00	8.93E+00	8.93E+00	4
130	10.865	37.347	3	1.88E-03	0.00E+00	2.63E-03	4.35E-01	1.53E+00	1.13E+01	1.13E+01	4
131	10.823	37.519	2	1.48E-02	0.00E+00	2.07E-02	5.08E-01	2.12E+00	1.56E+01	1.56E+01	5
135	10.812	37.913	2	1.42E-01	7.33E-02	1.99E-01	5.78E-01	3.62E+00	2.61E+01	2.63E+01	5
140	10.945	37.527	2	1.52E-02	0.00E+00	2.13E-02	5.07E-01	2.14E+00	1.57E+01	1.57E+01	5
141	10.896	37.670	2	6.37E-02	0.00E+00	8.92E-02	5.50E-01	2.74E+00	2.00E+01	2.00E+01	5
142	10.870	37.693	2	6.91E-02	0.00E+00	9.67E-02	5.60E-01	2.85E+00	2.07E+01	2.08E+01	5
157	11.070	37.707	2	3.97E-02	7.91E-04	5.56E-02	3.03E-01	1.59E+00	1.16E+01	1.16E+01	4
180	10.677	38.512	4	2.32E-01	2.84E+00	3.25E-01	6.63E-01	8.65E+00	6.15E+01	6.18E+01	7
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	9.48E-02	3.98E-01	2.92E+00	2.92E+00	2
264	11.055	37.800	6	7.35E-02	1.70E-02	1.03E-01	3.96E-01	2.07E+00	1.50E+01	1.51E+01	5
265	11.023	37.399	3	3.52E-03	0.00E+00	4.93E-03	4.12E-01	1.36E+00	1.01E+01	1.01E+01	4
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	3.80E-01	1.14E+00	8.51E+00	8.51E+00	4
267	10.904	37.540	4	2.20E-02	0.00E+00	3.08E-02	5.22E-01	2.21E+00	1.62E+01	1.62E+01	5
268	10.713	37.514	5	1.52E-02	0.00E+00	2.13E-02	5.06E-01	2.10E+00	1.54E+01	1.54E+01	5
269	10.804	37.388	2	4.24E-03	0.00E+00	5.94E-03	4.64E-01	1.69E+00	1.25E+01	1.25E+01	4
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	3.61E-01	1.05E+00	7.86E+00	7.86E+00	4
273	10.911	37.396	4	4.29E-03	0.00E+00	6.01E-03	4.67E-01	1.71E+00	1.26E+01	1.26E+01	4
274	10.911	37.542	4	2.21E-02	0.00E+00	3.09E-02	5.21E-01	2.22E+00	1.63E+01	1.63E+01	5
275	11.070	37.587	4	1.93E-02	0.00E+00	2.70E-02	2.93E-01	1.32E+00	9.65E+00	9.68E+00	4
276	10.945	37.696	4	6.44E-02	0.00E+00	9.02E-02	5.65E-01	2.86E+00	2.08E+01	2.09E+01	5
277	10.726	37.727	1	8.56E-02	6.54E-03	1.20E-01	5.57E-01	2.96E+00	2.15E+01	2.16E+01	5
278	10.760	37.219	1	0.00E+00	0.00E+00	0.00E+00	3.83E-01	1.22E+00	9.08E+00	9.08E+00	4
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	3.91E-01	1.13E+00	8.46E+00	8.46E+00	4
280	11.117	37.373	2	4.63E-04	0.00E+00	6.48E-04	8.81E-02	4.66E-01	3.39E+00	3.39E+00	3
281	10.432	37.409	2	0.00E+00	0.00E+00	0.00E+00	7.73E-02	4.33E-01	3.14E+00	3.14E+00	3
282	10.763	37.514	2	1.53E-02	0.00E+00	2.14E-02	5.07E-01	2.09E+00	1.53E+01	1.54E+01	5
284	10.744	37.636	4	5.45E-02	0.00E+00	7.63E-02	5.38E-01	2.61E+00	1.90E+01	1.91E+01	5
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	4.11E-01	1.30E+00	9.68E+00	9.68E+00	4
320	10.938	37.620	4	4.32E-02	0.00E+00	6.05E-02	5.39E-01	2.54E+00	1.85E+01	1.86E+01	5
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	3.06E-01	8.39E-01	6.30E+00	6.30E+00	4
322	10.479	37.545	4	1.28E-02	0.00E+00	1.79E-02	2.72E-01	1.12E+00	8.22E+00	8.24E+00	4
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	1.48E-01	5.11E-01	3.78E+00	3.78E+00	3
324	10.531	37.427	3	6.78E-03	0.00E+00	9.49E-03	4.23E-01	1.41E+00	1.05E+01	1.05E+01	4
325	10.510	37.141	14	0.00E+00	0.00E+00	0.00E+00	2.81E-01	7.33E-01	5.52E+00	5.52E+00	3

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected			24 rounds at aimpoint (10.70, 41.85)								
38	10.930	37.318	2	1.56E+00	1.35E+00	2.18E+00	1.56E+00	1.35E+00	1.16E+01	1.38E+01	4
40	10.797	37.297	5	1.57E+00	1.34E+00	2.20E+00	1.57E+00	1.34E+00	1.16E+01	1.38E+01	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

43	10.744	37.401	1	1.62E+00	1.50E+00	2.27E+00	1.62E+00	1.50E+00	1.28E+01	1.50E+01	5
44	10.463	37.339	2	6.75E-01	6.08E-01	9.45E-01	6.75E-01	6.08E-01	5.20E+00	6.15E+00	4
45	10.904	37.401	1	1.61E+00	1.51E+00	2.25E+00	1.61E+00	1.51E+00	1.28E+01	1.51E+01	5
46	10.857	37.427	1	1.63E+00	1.56E+00	2.28E+00	1.63E+00	1.56E+00	1.32E+01	1.55E+01	5
47	10.948	37.639	2	1.69E+00	1.92E+00	2.37E+00	1.69E+00	1.92E+00	1.58E+01	1.82E+01	5
71	10.792	37.756	1	1.80E+00	2.29E+00	2.52E+00	1.80E+00	2.29E+00	1.86E+01	2.11E+01	5
72	10.794	37.683	1	1.75E+00	2.05E+00	2.45E+00	1.75E+00	2.05E+00	1.68E+01	1.93E+01	5
73	10.841	37.206	1	1.50E+00	1.21E+00	2.10E+00	1.50E+00	1.21E+00	1.06E+01	1.27E+01	4
130	10.865	37.347	3	1.58E+00	1.42E+00	2.21E+00	1.58E+00	1.42E+00	1.22E+01	1.44E+01	4
131	10.823	37.519	2	1.68E+00	1.72E+00	2.35E+00	1.68E+00	1.72E+00	1.44E+01	1.67E+01	5
135	10.812	37.913	2	1.91E+00	2.95E+00	2.67E+00	1.91E+00	2.95E+00	2.33E+01	2.60E+01	5
140	10.945	37.527	2	1.64E+00	1.72E+00	2.30E+00	1.64E+00	1.72E+00	1.43E+01	1.66E+01	5
141	10.896	37.670	2	1.73E+00	2.01E+00	2.42E+00	1.73E+00	2.01E+00	1.65E+01	1.89E+01	5
142	10.870	37.693	2	1.74E+00	2.09E+00	2.44E+00	1.74E+00	2.09E+00	1.71E+01	1.95E+01	5
157	11.070	37.707	2	9.32E-01	1.15E+00	1.30E+00	9.32E-01	1.15E+00	9.35E+00	1.07E+01	4
180	10.677	38.512	4	2.37E+00	7.39E+00	3.32E+00	2.37E+00	7.39E+00	5.50E+01	5.84E+01	7
263	11.107	37.193	2	4.80E-01	4.29E-01	6.72E-01	4.80E-01	4.29E-01	3.68E+00	4.35E+00	3
264	11.055	37.800	6	1.14E+00	1.52E+00	1.60E+00	1.14E+00	1.52E+00	1.22E+01	1.38E+01	4
265	11.023	37.399	3	1.25E+00	1.16E+00	1.75E+00	1.25E+00	1.16E+00	9.87E+00	1.16E+01	4
266	10.804	37.172	5	1.48E+00	1.21E+00	2.07E+00	1.48E+00	1.21E+00	1.05E+01	1.26E+01	4
267	10.904	37.540	4	1.67E+00	1.75E+00	2.34E+00	1.67E+00	1.75E+00	1.46E+01	1.69E+01	5
268	10.713	37.514	5	1.67E+00	1.69E+00	2.34E+00	1.67E+00	1.69E+00	1.42E+01	1.65E+01	5
269	10.804	37.388	2	1.62E+00	1.49E+00	2.27E+00	1.62E+00	1.49E+00	1.27E+01	1.50E+01	4
270	10.922	37.125	2	1.45E+00	1.13E+00	2.03E+00	1.45E+00	1.13E+00	9.94E+00	1.20E+01	4
273	10.911	37.396	4	1.61E+00	1.50E+00	2.25E+00	1.61E+00	1.50E+00	1.28E+01	1.50E+01	5
274	10.911	37.542	4	1.67E+00	1.75E+00	2.34E+00	1.67E+00	1.75E+00	1.46E+01	1.69E+01	5
275	11.070	37.587	4	8.97E-01	9.89E-01	1.26E+00	8.97E-01	9.89E-01	8.18E+00	9.43E+00	4
276	10.945	37.696	4	1.73E+00	2.08E+00	2.42E+00	1.73E+00	2.08E+00	1.70E+01	1.94E+01	5
277	10.726	37.727	1	1.77E+00	2.18E+00	2.48E+00	1.77E+00	2.18E+00	1.77E+01	2.02E+01	5
278	10.760	37.219	1	1.52E+00	1.22E+00	2.13E+00	1.52E+00	1.22E+00	1.07E+01	1.28E+01	4
279	10.984	37.216	1	1.39E+00	1.10E+00	1.95E+00	1.39E+00	1.10E+00	9.65E+00	1.16E+01	4
280	11.117	37.373	2	4.24E-01	4.35E-01	5.94E-01	4.24E-01	4.35E-01	3.64E+00	4.23E+00	3
281	10.432	37.409	2	4.26E-01	4.21E-01	5.96E-01	4.26E-01	4.21E-01	3.54E+00	4.14E+00	3
282	10.763	37.514	2	1.68E+00	1.70E+00	2.35E+00	1.68E+00	1.70E+00	1.43E+01	1.66E+01	5
284	10.744	37.636	4	1.72E+00	1.92E+00	2.41E+00	1.72E+00	1.92E+00	1.58E+01	1.83E+01	5
319	10.888	37.255	8	1.53E+00	1.27E+00	2.14E+00	1.53E+00	1.27E+00	1.10E+01	1.32E+01	4
320	10.938	37.620	4	1.69E+00	1.89E+00	2.37E+00	1.69E+00	1.89E+00	1.56E+01	1.80E+01	5
321	11.039	37.195	1	1.05E+00	8.30E-01	1.47E+00	1.05E+00	8.30E-01	7.28E+00	8.75E+00	4
322	10.479	37.545	4	8.89E-01	9.08E-01	1.24E+00	8.89E-01	9.08E-01	7.60E+00	8.85E+00	4
323	10.463	37.224	3	6.43E-01	5.35E-01	9.00E-01	6.43E-01	5.35E-01	4.65E+00	5.55E+00	3
324	10.531	37.427	3	1.30E+00	1.20E+00	1.82E+00	1.30E+00	1.20E+00	1.02E+01	1.20E+01	4
325	10.510	37.141	14	1.01E+00	7.83E-01	1.41E+00	1.01E+00	7.83E-01	6.90E+00	8.31E+00	4

Case 2: Protected 24 rounds at aimpoint (10.70, 41.85)

38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	1.30E+00	1.26E+00	1.06E+01	1.06E+01	4
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	1.31E+00	1.25E+00	1.06E+01	1.06E+01	4
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	1.35E+00	1.39E+00	1.16E+01	1.16E+01	4
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	5.62E-01	5.66E-01	4.75E+00	4.75E+00	3
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.40E+00	1.17E+01	1.17E+01	4
46	10.857	37.427	1	0.00E+00	0.00E+00	0.00E+00	1.34E+00	1.45E+00	1.20E+01	1.20E+01	4
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.79E+00	1.45E+01	1.45E+01	4
71	10.792	37.756	1	7.89E-05	0.00E+00	1.10E-04	1.45E+00	2.13E+00	1.69E+01	1.69E+01	5
72	10.794	37.683	1	1.84E-05	0.00E+00	2.58E-05	1.43E+00	1.91E+00	1.54E+01	1.54E+01	5
73	10.841	37.206	1	0.00E+00	0.00E+00	0.00E+00	1.25E+00	1.13E+00	9.66E+00	9.66E+00	4
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	1.31E+00	1.32E+00	1.11E+01	1.11E+01	4
131	10.823	37.519	2	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.60E+00	1.31E+01	1.31E+01	4
135	10.812	37.913	2	6.74E-03	0.00E+00	9.44E-03	1.50E+00	2.74E+00	2.13E+01	2.13E+01	5
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	1.36E+00	1.60E+00	1.31E+01	1.31E+01	4
141	10.896	37.670	2	6.77E-06	0.00E+00	9.48E-06	1.42E+00	1.87E+00	1.51E+01	1.51E+01	5
142	10.870	37.693	2	1.09E-04	0.00E+00	1.53E-04	1.42E+00	1.94E+00	1.56E+01	1.56E+01	5
157	11.070	37.707	2	0.00E+00	0.00E+00	0.00E+00	7.59E-01	1.07E+00	8.55E+00	8.55E+00	4
180	10.677	38.512	4	3.29E-01	1.89E-01	4.61E-01	1.59E+00	6.89E+00	5.05E+01	5.09E+01	7
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	4.01E-01	3.99E-01	3.35E+00	3.35E+00	3
264	11.055	37.800	6	0.00E+00	0.00E+00	0.00E+00	9.17E-01	1.41E+00	1.12E+01	1.12E+01	4
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	1.04E+00	1.08E+00	9.02E+00	9.02E+00	4
266	10.804	37.172	5	0.00E+00	0.00E+00	0.00E+00	1.24E+00	1.12E+00	9.58E+00	9.58E+00	4
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.63E+00	1.33E+01	1.33E+01	4
268	10.713	37.514	5	0.00E+00	0.00E+00	0.00E+00	1.39E+00	1.58E+00	1.30E+01	1.30E+01	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	1.35E+00	1.39E+00	1.16E+01	1.16E+01	4
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	1.21E+00	1.05E+00	9.04E+00	9.04E+00	4
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.39E+00	1.16E+01	1.16E+01	4
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	1.37E+00	1.63E+00	1.33E+01	1.33E+01	4
275	11.070	37.587	4	0.00E+00	0.00E+00	0.00E+00	7.38E-01	9.20E-01	7.47E+00	7.47E+00	4
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	1.40E+00	1.94E+00	1.55E+01	1.55E+01	5
277	10.726	37.727	1	1.86E-04	0.00E+00	2.60E-04	1.44E+00	2.03E+00	1.62E+01	1.62E+01	5
278	10.760	37.219	1	0.00E+00	0.00E+00	0.00E+00	1.27E+00	1.14E+00	9.76E+00	9.76E+00	4
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	1.16E+00	1.03E+00	8.83E+00	8.83E+00	4
280	11.117	37.373	2	0.00E+00	0.00E+00	0.00E+00	3.49E-01	4.04E-01	3.32E+00	3.32E+00	3
281	10.432	37.409	2	0.00E+00	0.00E+00	0.00E+00	3.50E-01	3.92E-01	3.23E+00	3.23E+00	3
282	10.763	37.514	2	0.00E+00	0.00E+00	0.00E+00	1.39E+00	1.58E+00	1.30E+01	1.30E+01	4
284	10.744	37.636	4	0.00E+00	0.00E+00	0.00E+00	1.41E+00	1.79E+00	1.45E+01	1.45E+01	4
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	1.28E+00	1.18E+00	1.01E+01	1.01E+01	4
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.76E+00	1.43E+01	1.43E+01	4
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	8.79E-01	7.72E-01	6.63E+00	6.63E+00	4
322	10.479	37.545	4	0.00E+00	0.00E+00	0.00E+00	7.36E-01	8.44E-01	6.94E+00	6.94E+00	4
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	5.38E-01	4.98E-01	4.24E+00	4.24E+00	3
324	10.531	37.427	3	0.00E+00	0.00E+00	0.00E+00	1.09E+00	1.12E+00	9.37E+00	9.37E+00	4
325	10.510	37.141	14	0.00E+00	0.00E+00	0.00E+00	8.49E-01	7.28E-01	6.28E+00	6.28E+00	4

VX 250kg TBM
Light Attack
Height of Release: 500m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				1 round at aimpoint (10.90, 59.80)							
4	11.522	47.053	4	7.59E-02	4.77E-01	1.06E-01	7.59E-02	4.77E-01	3.45E+00	3.55E+00	3
5	11.662	47.449	4	1.99E-05	0.00E+00	2.79E-05	1.99E-05	0.00E+00	2.79E-05	5.57E-05	1
9	11.139	47.431	4	3.29E-01	5.26E+00	4.61E-01	3.29E-01	5.26E+00	3.73E+01	3.77E+01	6
10	11.045	47.442	4	3.76E-01	6.60E+00	5.26E-01	3.76E-01	6.60E+00	4.67E+01	4.73E+01	6
11	11.250	47.445	4	2.43E-01	3.48E+00	3.40E-01	2.43E-01	3.48E+00	2.47E+01	2.50E+01	5
12	11.341	47.435	4	1.53E-01	2.16E+00	2.14E-01	1.53E-01	2.16E+00	1.53E+01	1.55E+01	5
17	11.466	46.869	2	1.03E-01	9.13E-01	1.44E-01	1.03E-01	9.13E-01	6.54E+00	6.68E+00	4
18	11.521	46.841	2	6.96E-02	5.02E-01	9.74E-02	6.96E-02	5.02E-01	3.61E+00	3.71E+00	3
38	10.930	37.318	2	1.16E-01	8.07E-01	1.62E-01	1.16E-01	8.07E-01	5.81E+00	5.97E+00	3
40	10.797	37.297	5	1.07E-01	7.85E-01	1.50E-01	1.07E-01	7.85E-01	5.64E+00	5.79E+00	3
43	10.744	37.401	1	9.35E-02	7.85E-01	1.31E-01	9.35E-02	7.85E-01	5.63E+00	5.76E+00	3
44	10.463	37.339	2	5.69E-02	4.42E-01	7.97E-02	5.69E-02	4.42E-01	3.17E+00	3.25E+00	3
45	10.904	37.401	1	1.24E-01	8.44E-01	1.74E-01	1.24E-01	8.44E-01	6.08E+00	6.26E+00	4
46	10.857	37.427	1	1.21E-01	8.46E-01	1.69E-01	1.21E-01	8.46E-01	6.09E+00	6.26E+00	4
47	10.948	37.639	2	1.25E-01	9.11E-01	1.75E-01	1.25E-01	9.11E-01	6.55E+00	6.73E+00	4
51	10.624	44.475	2	2.39E-01	2.93E+00	3.35E-01	2.39E-01	2.93E+00	2.08E+01	2.12E+01	5
52	10.631	44.733	2	2.50E-01	3.16E+00	3.50E-01	2.50E-01	3.16E+00	2.25E+01	2.28E+01	5
53	11.247	46.908	2	2.27E-01	3.41E+00	3.18E-01	2.27E-01	3.41E+00	2.42E+01	2.45E+01	5
54	10.749	44.438	2	2.81E-01	3.78E+00	3.93E-01	2.81E-01	3.78E+00	2.69E+01	2.72E+01	5
71	10.792	37.756	1	1.18E-01	9.28E-01	1.65E-01	1.18E-01	9.28E-01	6.66E+00	6.83E+00	4
72	10.794	37.683	1	1.18E-01	9.08E-01	1.65E-01	1.18E-01	9.08E-01	6.52E+00	6.69E+00	4
73	10.841	37.206	1	1.05E-01	7.58E-01	1.47E-01	1.05E-01	7.58E-01	5.45E+00	5.60E+00	3
112	11.555	50.608	4	2.30E-02	0.00E+00	3.22E-02	2.30E-02	0.00E+00	3.22E-02	6.44E-02	1
113	11.396	50.608	4	8.56E-02	1.36E+00	1.20E-01	8.56E-02	1.36E+00	9.64E+00	9.76E+00	4
114	11.475	50.622	4	5.79E-02	4.75E-01	8.11E-02	5.79E-02	4.75E-01	3.41E+00	3.49E+00	3
115	11.688	50.601	4	5.07E-06	0.00E+00	7.10E-06	5.07E-06	0.00E+00	7.10E-06	1.42E-05	1
116	10.166	49.480	5	2.82E-05	0.00E+00	3.95E-05	2.82E-05	0.00E+00	3.95E-05	7.90E-05	1
117	10.234	49.391	3	8.11E-03	6.32E-02	1.14E-02	8.11E-03	6.32E-02	4.54E-01	4.65E-01	2
130	10.865	37.347	3	1.17E-01	8.18E-01	1.64E-01	1.17E-01	8.18E-01	5.89E+00	6.05E+00	4
131	10.823	37.519	2	1.19E-01	8.68E-01	1.67E-01	1.19E-01	8.68E-01	6.24E+00	6.41E+00	4
135	10.812	37.913	2	1.26E-01	9.86E-01	1.76E-01	1.26E-01	9.86E-01	7.08E+00	7.25E+00	4
136	11.504	46.883	3	8.75E-02	6.04E-01	1.23E-01	8.75E-02	6.04E-01	4.35E+00	4.47E+00	3
137	11.421	46.891	3	1.20E-01	1.29E+00	1.68E-01	1.20E-01	1.29E+00	9.20E+00	9.37E+00	4
140	10.945	37.527	2	1.23E-01	8.76E-01	1.72E-01	1.23E-01	8.76E-01	6.30E+00	6.48E+00	4
141	10.896	37.670	2	1.30E-01	9.30E-01	1.82E-01	1.30E-01	9.30E-01	6.69E+00	6.87E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

142	10.870	37.693	2	1.28E-01	9.31E-01	1.79E-01	1.28E-01	9.31E-01	6.70E+00	6.88E+00	4
143	10.531	44.636	2	2.06E-01	2.25E+00	2.88E-01	2.06E-01	2.25E+00	1.60E+01	1.63E+01	5
144	11.197	46.981	8	2.98E-01	4.15E+00	4.17E-01	2.98E-01	4.15E+00	2.95E+01	2.99E+01	5
145	11.255	47.090	8	2.24E-01	3.32E+00	3.14E-01	2.24E-01	3.32E+00	2.36E+01	2.39E+01	5
146	11.275	46.996	8	1.93E-01	3.01E+00	2.70E-01	1.93E-01	3.01E+00	2.13E+01	2.16E+01	5
147	10.670	44.618	8	2.58E-01	3.39E+00	3.61E-01	2.58E-01	3.39E+00	2.41E+01	2.45E+01	5
149	10.678	44.506	3	2.53E-01	3.38E+00	3.54E-01	2.53E-01	3.38E+00	2.40E+01	2.44E+01	5
150	10.733	44.618	8	2.82E-01	3.84E+00	3.95E-01	2.82E-01	3.84E+00	2.73E+01	2.77E+01	5
157	11.070	37.707	2	9.20E-02	8.58E-01	1.29E-01	9.20E-02	8.58E-01	6.13E+00	6.26E+00	4
158	10.148	49.313	4	1.74E-05	0.00E+00	2.44E-05	1.74E-05	0.00E+00	2.44E-05	4.87E-05	1
161	11.135	47.004	2	3.47E-01	5.15E+00	4.86E-01	3.47E-01	5.15E+00	3.65E+01	3.70E+01	6
166	10.631	44.556	8	2.44E-01	3.03E+00	3.42E-01	2.44E-01	3.03E+00	2.16E+01	2.19E+01	5
180	10.677	38.512	4	1.10E-01	1.00E+00	1.54E-01	1.10E-01	1.00E+00	7.15E+00	7.31E+00	4
181	11.428	38.418	4	3.54E-02	4.19E-01	4.96E-02	3.54E-02	4.19E-01	2.98E+00	3.03E+00	3
182	10.160	38.142	4	1.26E-02	0.00E+00	1.76E-02	1.26E-02	0.00E+00	1.76E-02	3.53E-02	1
190	10.571	44.446	8	2.17E-01	2.49E+00	3.04E-01	2.17E-01	2.49E+00	1.77E+01	1.80E+01	5
263	11.107	37.193	2	6.86E-02	6.79E-01	9.60E-02	6.86E-02	6.79E-01	4.85E+00	4.95E+00	3
264	11.055	37.800	6	9.95E-02	8.98E-01	1.39E-01	9.95E-02	8.98E-01	6.43E+00	6.56E+00	4
265	11.023	37.399	3	1.06E-01	8.10E-01	1.48E-01	1.06E-01	8.10E-01	5.82E+00	5.97E+00	3
266	10.804	37.172	5	9.91E-02	7.39E-01	1.39E-01	9.91E-02	7.39E-01	5.31E+00	5.45E+00	3
267	10.904	37.540	4	1.27E-01	8.88E-01	1.78E-01	1.27E-01	8.88E-01	6.39E+00	6.57E+00	4
268	10.713	37.514	5	8.29E-02	7.91E-01	1.16E-01	8.29E-02	7.91E-01	5.65E+00	5.77E+00	3
269	10.804	37.388	2	1.15E-01	8.24E-01	1.61E-01	1.15E-01	8.24E-01	5.93E+00	6.09E+00	4
270	10.922	37.125	2	1.03E-01	7.33E-01	1.44E-01	1.03E-01	7.33E-01	5.28E+00	5.42E+00	3
271	10.540	44.432	3	1.99E-01	2.24E+00	2.79E-01	1.99E-01	2.24E+00	1.60E+01	1.62E+01	5
272	10.544	44.527	3	2.08E-01	2.31E+00	2.91E-01	2.08E-01	2.31E+00	1.65E+01	1.68E+01	5
273	10.911	37.396	4	1.23E-01	8.41E-01	1.72E-01	1.23E-01	8.41E-01	6.06E+00	6.23E+00	4
274	10.911	37.542	4	1.26E-01	8.87E-01	1.76E-01	1.26E-01	8.87E-01	6.39E+00	6.56E+00	4
275	11.070	37.587	4	9.05E-02	8.25E-01	1.27E-01	9.05E-02	8.25E-01	5.90E+00	6.03E+00	4
276	10.945	37.696	4	1.26E-01	9.29E-01	1.76E-01	1.26E-01	9.29E-01	6.68E+00	6.86E+00	4
277	10.726	37.727	1	9.06E-02	8.60E-01	1.27E-01	9.06E-02	8.60E-01	6.15E+00	6.27E+00	4
278	10.760	37.219	1	8.91E-02	7.31E-01	1.25E-01	8.91E-02	7.31E-01	5.24E+00	5.37E+00	3
279	10.984	37.216	1	1.03E-01	7.58E-01	1.44E-01	1.03E-01	7.58E-01	5.45E+00	5.59E+00	3
280	11.117	37.373	2	7.22E-02	7.30E-01	1.01E-01	7.22E-02	7.30E-01	5.21E+00	5.31E+00	3
281	10.432	37.409	2	6.21E-02	4.08E-01	8.69E-02	6.21E-02	4.08E-01	2.94E+00	3.03E+00	3
282	10.763	37.514	2	1.03E-01	8.32E-01	1.44E-01	1.03E-01	8.32E-01	5.97E+00	6.11E+00	4
284	10.744	37.636	4	9.68E-02	8.51E-01	1.36E-01	9.68E-02	8.51E-01	6.09E+00	6.23E+00	4
291	11.500	47.434	2	7.78E-02	6.10E-01	1.09E-01	7.78E-02	6.10E-01	4.38E+00	4.49E+00	3
319	10.888	37.255	8	1.13E-01	7.85E-01	1.58E-01	1.13E-01	7.85E-01	5.65E+00	5.81E+00	3
320	10.938	37.620	4	1.25E-01	9.07E-01	1.75E-01	1.25E-01	9.07E-01	6.52E+00	6.70E+00	4
321	11.039	37.195	1	8.80E-02	7.23E-01	1.23E-01	8.80E-02	7.23E-01	5.18E+00	5.31E+00	3
322	10.479	37.545	4	6.36E-02	5.04E-01	8.90E-02	6.36E-02	5.04E-01	3.62E+00	3.71E+00	3
323	10.463	37.224	3	5.66E-02	4.23E-01	7.92E-02	5.66E-02	4.23E-01	3.04E+00	3.12E+00	3
324	10.531	37.427	3	5.44E-02	5.66E-01	7.62E-02	5.44E-02	5.66E-01	4.04E+00	4.11E+00	3
325	10.510	37.141	14	6.04E-02	4.76E-01	8.46E-02	6.04E-02	4.76E-01	3.42E+00	3.50E+00	3
355	11.345	50.611	5	1.29E-01	2.24E+00	1.81E-01	1.29E-01	2.24E+00	1.59E+01	1.60E+01	5
357	11.624	50.617	5	3.11E-05	0.00E+00	4.35E-05	3.11E-05	0.00E+00	4.35E-05	8.71E-05	1

Case 2: Protected 1 round at aimpoint 11.00, 38.55

38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E+01	1.67E+02	1.67E+02	8
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E+00	1.53E+01	1.53E+01	5
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E+00	2.69E+01	2.69E+01	5
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-03	5.57E-02	5.57E-02	1
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E+00	6.48E+01	6.48E+01	7
157	11.070	37.707	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.29E-01	6.50E+00	6.50E+00	4
263	11.107	37.193	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+00	8.33E+00	8.33E+00	4
265	11.023	37.399	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E+02	9.45E+02	9.45E+02	8
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-01	4.78E+00	4.78E+00	3
270	10.922	37.125	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E+01	2.09E+02	2.09E+02	8
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E+00	4.29E+01	4.29E+01	6
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E+00	1.27E+01	1.27E+01	4
275	11.070	37.587	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E+00	2.46E+01	2.46E+01	5
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E+00	1.23E+01	1.23E+01	4
279	10.984	37.216	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E+02	1.23E+03	1.23E+03	8
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-01	4.47E+00	4.47E+00	3
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E+00	2.49E+01	2.49E+01	5
321	11.039	37.195	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E+01	6.86E+02	6.86E+02	8

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

VX 500kg TBM
Moderate Attack
Height of Release: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (10.50, 58.80)											
3	11.844	47.063	4	1.09E-01	2.52E+00	1.53E-01	1.09E-01	2.52E+00	1.78E+01	1.79E+01	5
4	11.522	47.053	4	1.73E-01	3.25E+00	2.42E-01	1.73E-01	3.25E+00	2.30E+01	2.32E+01	5
5	11.662	47.449	4	1.29E-01	3.19E+00	1.81E-01	1.29E-01	3.19E+00	2.25E+01	2.27E+01	5
6	11.753	47.449	4	1.21E-01	2.95E+00	1.69E-01	1.21E-01	2.95E+00	2.08E+01	2.10E+01	5
7	11.842	47.452	4	1.19E-01	2.73E+00	1.67E-01	1.19E-01	2.73E+00	1.93E+01	1.94E+01	5
8	11.915	47.462	4	1.15E-01	2.54E+00	1.61E-01	1.15E-01	2.54E+00	1.79E+01	1.81E+01	5
9	11.139	47.431	4	1.48E-01	4.38E+00	2.07E-01	1.48E-01	4.38E+00	3.09E+01	3.11E+01	6
10	11.045	47.442	4	1.54E-01	4.55E+00	2.16E-01	1.54E-01	4.55E+00	3.21E+01	3.23E+01	6
11	11.250	47.445	4	9.37E-02	4.18E+00	1.31E-01	9.37E-02	4.18E+00	2.94E+01	2.95E+01	5
12	11.341	47.435	4	8.73E-02	3.98E+00	1.22E-01	8.73E-02	3.98E+00	2.80E+01	2.81E+01	5
15	11.948	44.446	3	4.08E-02	1.34E+00	5.71E-02	4.08E-02	1.34E+00	9.44E+00	9.49E+00	4
16	11.847	44.587	2	5.03E-02	1.51E+00	7.04E-02	5.03E-02	1.51E+00	1.06E+01	1.07E+01	4
17	11.466	46.869	2	1.79E-01	3.24E+00	2.51E-01	1.79E-01	3.24E+00	2.29E+01	2.32E+01	5
18	11.521	46.841	2	1.84E-01	3.11E+00	2.58E-01	1.84E-01	3.11E+00	2.20E+01	2.23E+01	5
19	9.531	49.106	1	1.29E-01	5.20E+00	1.81E-01	1.29E-01	5.20E+00	3.66E+01	3.68E+01	6
20	9.473	49.104	2	1.42E-01	4.95E+00	1.99E-01	1.42E-01	4.95E+00	3.48E+01	3.50E+01	6
23	8.542	46.954	2	2.33E-02	1.04E+00	3.26E-02	2.33E-02	1.04E+00	7.31E+00	7.35E+00	4
24	8.524	46.961	2	2.15E-02	1.00E+00	3.01E-02	2.15E-02	1.00E+00	7.03E+00	7.06E+00	4
26	8.467	46.959	2	1.65E-02	8.91E-01	2.31E-02	1.65E-02	8.91E-01	6.26E+00	6.28E+00	4
28	8.488	46.960	2	1.82E-02	9.35E-01	2.55E-02	1.82E-02	9.35E-01	6.57E+00	6.60E+00	4
31	8.662	48.870	1	6.23E-02	1.76E+00	8.72E-02	6.23E-02	1.76E+00	1.24E+01	1.25E+01	4
32	11.792	44.548	2	5.32E-02	1.56E+00	7.45E-02	5.32E-02	1.56E+00	1.10E+01	1.11E+01	4
33	11.948	44.446	1	4.08E-02	1.34E+00	5.71E-02	4.08E-02	1.34E+00	9.44E+00	9.49E+00	4
34	11.896	44.456	2	4.52E-02	1.41E+00	6.33E-02	4.52E-02	1.41E+00	9.93E+00	1.00E+01	4
35	11.755	44.396	2	5.27E-02	1.56E+00	7.38E-02	5.27E-02	1.56E+00	1.10E+01	1.11E+01	4
36	11.773	44.474	1	5.31E-02	1.56E+00	7.43E-02	5.31E-02	1.56E+00	1.10E+01	1.11E+01	4
37	11.849	44.493	2	4.87E-02	1.48E+00	6.82E-02	4.87E-02	1.48E+00	1.04E+01	1.05E+01	4
38	10.930	37.318	2	1.63E-03	4.41E-01	2.28E-03	1.63E-03	4.41E-01	3.09E+00	3.09E+00	3
39	11.857	44.366	2	4.61E-02	1.43E+00	6.45E-02	4.61E-02	1.43E+00	1.01E+01	1.01E+01	4
40	10.797	37.297	5	1.85E-03	4.48E-01	2.59E-03	1.85E-03	4.48E-01	3.14E+00	3.14E+00	3
41	11.940	44.365	2	4.02E-02	1.33E+00	5.63E-02	4.02E-02	1.33E+00	9.37E+00	9.42E+00	4
42	11.953	44.514	2	4.14E-02	1.35E+00	5.80E-02	4.14E-02	1.35E+00	9.51E+00	9.57E+00	4
43	10.744	37.401	1	1.93E-03	4.68E-01	2.70E-03	1.93E-03	4.68E-01	3.28E+00	3.28E+00	3
44	10.463	37.339	2	1.88E-03	4.58E-01	2.63E-03	1.88E-03	4.58E-01	3.21E+00	3.21E+00	3
45	10.904	37.401	1	1.89E-03	4.56E-01	2.65E-03	1.89E-03	4.56E-01	3.19E+00	3.20E+00	3
46	10.857	37.427	1	1.94E-03	4.64E-01	2.72E-03	1.94E-03	4.64E-01	3.25E+00	3.25E+00	3
47	10.948	37.639	2	1.87E-03	4.88E-01	2.62E-03	1.87E-03	4.88E-01	3.42E+00	3.42E+00	3
50	11.790	47.141	2	1.16E-01	2.68E+00	1.62E-01	1.16E-01	2.68E+00	1.89E+01	1.91E+01	5
51	10.624	44.475	2	1.11E-01	2.48E+00	1.55E-01	1.11E-01	2.48E+00	1.75E+01	1.77E+01	5
52	10.631	44.733	2	1.31E-01	2.64E+00	1.83E-01	1.31E-01	2.64E+00	1.87E+01	1.88E+01	5
53	11.247	46.908	2	1.05E-01	3.69E+00	1.47E-01	1.05E-01	3.69E+00	2.60E+01	2.61E+01	5
54	10.749	44.438	2	1.07E-01	2.43E+00	1.50E-01	1.07E-01	2.43E+00	1.72E+01	1.73E+01	5
66	11.938	44.438	2	4.16E-02	1.35E+00	5.82E-02	4.16E-02	1.35E+00	9.51E+00	9.57E+00	4
69	8.447	52.999	2	2.46E-02	1.22E+00	3.44E-02	2.46E-02	1.22E+00	8.57E+00	8.61E+00	4
71	10.792	37.756	1	2.19E-03	5.31E-01	3.07E-03	2.19E-03	5.31E-01	3.72E+00	3.72E+00	3
72	10.794	37.683	1	2.14E-03	5.14E-01	3.00E-03	2.14E-03	5.14E-01	3.60E+00	3.60E+00	3
73	10.841	37.206	1	1.78E-03	4.33E-01	2.49E-03	1.78E-03	4.33E-01	3.03E+00	3.04E+00	3
76	9.734	50.577	4	9.70E-02	8.91E+00	1.36E-01	9.70E-02	8.91E+00	6.25E+01	6.26E+01	7
77	9.823	50.621	4	1.24E-01	9.59E+00	1.74E-01	1.24E-01	9.59E+00	6.73E+01	6.75E+01	7
78	9.896	50.603	4	1.42E-01	1.00E+01	1.99E-01	1.42E-01	1.00E+01	7.02E+01	7.04E+01	7
79	9.967	50.598	4	1.48E-01	1.04E+01	2.07E-01	1.48E-01	1.04E+01	7.30E+01	7.32E+01	7

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

80	7.801	50.708	4	4.00E-07	9.93E-02	5.60E-07	4.00E-07	9.93E-02	6.95E-01	6.95E-01	2
81	7.863	50.764	4	6.45E-07	1.70E-01	9.03E-07	6.45E-07	1.70E-01	1.19E+00	1.19E+00	2
82	7.987	50.728	4	1.03E-03	3.41E-01	1.44E-03	1.03E-03	3.41E-01	2.39E+00	2.39E+00	2
83	8.066	50.692	4	1.97E-03	4.68E-01	2.76E-03	1.97E-03	4.68E-01	3.28E+00	3.28E+00	3
84	8.788	50.504	4	1.28E-01	2.77E+00	1.79E-01	1.28E-01	2.77E+00	1.96E+01	1.97E+01	5
85	8.849	50.506	4	1.55E-01	3.08E+00	2.17E-01	1.55E-01	3.08E+00	2.18E+01	2.20E+01	5
86	8.948	50.500	4	1.67E-01	3.61E+00	2.34E-01	1.67E-01	3.61E+00	2.55E+01	2.57E+01	5
87	8.991	50.486	4	1.57E-01	3.85E+00	2.20E-01	1.57E-01	3.85E+00	2.72E+01	2.74E+01	5
88	9.099	50.438	3	1.33E-01	4.44E+00	1.86E-01	1.33E-01	4.44E+00	3.13E+01	3.15E+01	6
89	7.766	50.608	3	2.62E-07	5.80E-02	3.67E-07	2.62E-07	5.80E-02	4.06E-01	4.06E-01	2
98	12.188	47.396	4	6.91E-02	1.84E+00	9.67E-02	6.91E-02	1.84E+00	1.30E+01	1.31E+01	4
99	12.240	47.476	4	6.34E-02	1.75E+00	8.88E-02	6.34E-02	1.75E+00	1.23E+01	1.24E+01	4
100	12.353	47.466	4	4.89E-02	1.49E+00	6.85E-02	4.89E-02	1.49E+00	1.05E+01	1.06E+01	4
101	12.416	47.419	4	4.13E-02	1.33E+00	5.78E-02	4.13E-02	1.33E+00	9.37E+00	9.43E+00	4
102	12.489	50.495	3	5.87E-02	1.78E+00	8.22E-02	5.87E-02	1.78E+00	1.25E+01	1.26E+01	4
104	12.834	50.654	4	8.06E-03	7.01E-01	1.13E-02	8.06E-03	7.01E-01	4.92E+00	4.93E+00	3
106	12.671	50.683	4	2.33E-02	1.08E+00	3.26E-02	2.33E-02	1.08E+00	7.59E+00	7.63E+00	4
108	12.738	50.667	4	1.49E-02	8.95E-01	2.09E-02	1.49E-02	8.95E-01	6.29E+00	6.31E+00	4
109	12.599	50.677	4	3.72E-02	1.36E+00	5.21E-02	3.72E-02	1.36E+00	9.57E+00	9.62E+00	4
112	11.555	50.608	4	7.73E-02	7.51E+00	1.08E-01	7.73E-02	7.51E+00	5.27E+01	5.28E+01	7
113	11.396	50.608	4	8.36E-02	8.67E+00	1.17E-01	8.36E-02	8.67E+00	6.08E+01	6.09E+01	7
114	11.475	50.622	4	6.42E-02	8.12E+00	8.99E-02	6.42E-02	8.12E+00	5.69E+01	5.70E+01	7
115	11.688	50.601	4	1.25E-01	6.51E+00	1.75E-01	1.25E-01	6.51E+00	4.57E+01	4.59E+01	6
116	10.166	49.480	5	1.01E-01	8.17E+00	1.41E-01	1.01E-01	8.17E+00	5.73E+01	5.75E+01	7
117	10.234	49.391	3	1.11E-01	8.10E+00	1.55E-01	1.11E-01	8.10E+00	5.69E+01	5.70E+01	7
118	8.228	53.122	5	4.93E-03	5.24E-01	6.90E-03	4.93E-03	5.24E-01	3.67E+00	3.68E+00	3
119	8.358	53.143	5	1.38E-02	8.88E-01	1.93E-02	1.38E-02	8.88E-01	6.24E+00	6.25E+00	4
120	12.896	53.002	5	8.85E-05	1.97E-01	1.24E-04	8.85E-05	1.97E-01	1.38E+00	1.38E+00	2
121	13.023	52.992	5	6.43E-07	7.36E-02	9.00E-07	6.43E-07	7.36E-02	5.15E-01	5.15E-01	2
124	11.803	44.430	6	5.04E-02	1.51E+00	7.06E-02	5.04E-02	1.51E+00	1.06E+01	1.07E+01	4
125	11.841	44.433	4	4.82E-02	1.47E+00	6.75E-02	4.82E-02	1.47E+00	1.04E+01	1.04E+01	4
126	8.731	48.878	3	7.50E-02	1.97E+00	1.05E-01	7.50E-02	1.97E+00	1.39E+01	1.40E+01	4
129	8.527	47.021	8	2.25E-02	1.02E+00	3.15E-02	2.25E-02	1.02E+00	7.17E+00	7.20E+00	4
130	10.865	37.347	3	1.88E-03	4.52E-01	2.63E-03	1.88E-03	4.52E-01	3.17E+00	3.17E+00	3
131	10.823	37.519	2	2.01E-03	4.80E-01	2.81E-03	2.01E-03	4.80E-01	3.36E+00	3.37E+00	3
135	10.812	37.913	2	2.30E-03	5.66E-01	3.22E-03	2.30E-03	5.66E-01	3.97E+00	3.97E+00	3
136	11.504	46.883	3	1.87E-01	3.18E+00	2.62E-01	1.87E-01	3.18E+00	2.25E+01	2.28E+01	5
137	11.421	46.891	3	1.63E-01	3.35E+00	2.28E-01	1.63E-01	3.35E+00	2.37E+01	2.39E+01	5
139	9.529	49.003	3	1.34E-01	5.04E+00	1.88E-01	1.34E-01	5.04E+00	3.55E+01	3.57E+01	6
140	10.945	37.527	2	1.75E-03	4.69E-01	2.45E-03	1.75E-03	4.69E-01	3.29E+00	3.29E+00	3
141	10.896	37.670	2	2.11E-03	5.02E-01	2.95E-03	2.11E-03	5.02E-01	3.52E+00	3.52E+00	3
142	10.870	37.693	2	2.13E-03	5.10E-01	2.98E-03	2.13E-03	5.10E-01	3.57E+00	3.58E+00	3
143	10.531	44.636	2	1.23E-01	2.59E+00	1.72E-01	1.23E-01	2.59E+00	1.83E+01	1.85E+01	5
144	11.197	46.981	8	9.23E-02	3.84E+00	1.29E-01	9.23E-02	3.84E+00	2.70E+01	2.71E+01	5
145	11.255	47.090	8	1.02E-01	3.85E+00	1.43E-01	1.02E-01	3.85E+00	2.71E+01	2.72E+01	5
146	11.275	46.996	8	1.09E-01	3.72E+00	1.53E-01	1.09E-01	3.72E+00	2.62E+01	2.63E+01	5
147	10.670	44.618	8	1.22E-01	2.56E+00	1.71E-01	1.22E-01	2.56E+00	1.81E+01	1.83E+01	5
149	10.678	44.506	3	1.13E-01	2.50E+00	1.58E-01	1.13E-01	2.50E+00	1.77E+01	1.78E+01	5
150	10.733	44.618	8	1.21E-01	2.55E+00	1.69E-01	1.21E-01	2.55E+00	1.80E+01	1.82E+01	5
152	12.856	50.355	6	7.76E-03	6.68E-01	1.09E-02	7.76E-03	6.68E-01	4.69E+00	4.70E+00	3
156	9.599	49.026	4	1.03E-01	5.36E+00	1.44E-01	1.03E-01	5.36E+00	3.77E+01	3.78E+01	6
157	11.070	37.707	2	1.47E-03	4.84E-01	2.06E-03	1.47E-03	4.84E-01	3.39E+00	3.39E+00	3
158	10.148	49.313	4	9.71E-02	7.76E+00	1.36E-01	9.71E-02	7.76E+00	5.45E+01	5.46E+01	7
160	9.458	48.992	2	1.43E-01	4.75E+00	2.00E-01	1.43E-01	4.75E+00	3.35E+01	3.37E+01	6
161	11.135	47.004	2	8.20E-02	3.97E+00	1.15E-01	8.20E-02	3.97E+00	2.79E+01	2.80E+01	5
166	10.631	44.556	8	1.17E-01	2.53E+00	1.64E-01	1.17E-01	2.53E+00	1.79E+01	1.80E+01	5
167	11.875	44.589	3	4.85E-02	1.48E+00	6.79E-02	4.85E-02	1.48E+00	1.04E+01	1.05E+01	4
180	10.677	38.512	4	5.95E-03	6.70E-01	8.33E-03	5.95E-03	6.70E-01	4.70E+00	4.71E+00	3
181	11.428	38.418	4	2.15E-03	5.18E-01	3.01E-03	2.15E-03	5.18E-01	3.63E+00	3.63E+00	3
182	10.160	38.142	4	3.25E-03	5.94E-01	4.55E-03	3.25E-03	5.94E-01	4.16E+00	4.17E+00	3
185	12.438	50.621	2	7.24E-02	2.03E+00	1.01E-01	7.24E-02	2.03E+00	1.43E+01	1.44E+01	4
188	12.807	52.968	3	2.16E-03	4.53E-01	3.02E-03	2.16E-03	4.53E-01	3.17E+00	3.18E+00	3
189	8.588	53.062	3	5.14E-02	1.82E+00	7.20E-02	5.14E-02	1.82E+00	1.28E+01	1.29E+01	4
190	10.571	44.446	8	1.09E-01	2.47E+00	1.53E-01	1.09E-01	2.47E+00	1.74E+01	1.76E+01	5
221	8.456	47.003	4	1.61E-02	8.77E-01	2.25E-02	1.61E-02	8.77E-01	6.16E+00	6.18E+00	4
222	8.469	47.067	4	1.77E-02	9.16E-01	2.48E-02	1.77E-02	9.16E-01	6.44E+00	6.46E+00	4
223	8.521	47.070	4	2.24E-02	1.02E+00	3.14E-02	2.24E-02	1.02E+00	7.17E+00	7.20E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

224	8.494	47.075	4	1.98E-02	9.71E-01	2.77E-02	1.98E-02	9.71E-01	6.82E+00	6.85E+00	4
255	11.809	47.158	7	1.15E-01	2.65E+00	1.61E-01	1.15E-01	2.65E+00	1.87E+01	1.89E+01	5
256	8.601	46.901	2	2.86E-02	1.14E+00	4.00E-02	2.86E-02	1.14E+00	8.02E+00	8.06E+00	4
257	8.424	46.917	2	1.28E-02	7.97E-01	1.79E-02	1.28E-02	7.97E-01	5.60E+00	5.61E+00	3
258	8.403	46.914	2	1.12E-02	7.54E-01	1.57E-02	1.12E-02	7.54E-01	5.29E+00	5.31E+00	3
259	8.572	46.898	3	2.57E-02	1.08E+00	3.60E-02	2.57E-02	1.08E+00	7.60E+00	7.63E+00	4
263	11.107	37.193	2	1.28E-06	3.90E-01	1.79E-06	1.28E-06	3.90E-01	2.73E+00	2.73E+00	2
264	11.055	37.800	6	1.74E-03	5.04E-01	2.44E-03	1.74E-03	5.04E-01	3.53E+00	3.53E+00	3
265	11.023	37.399	3	1.07E-03	4.39E-01	1.50E-03	1.07E-03	4.39E-01	3.07E+00	3.08E+00	3
266	10.804	37.172	5	1.72E-03	4.21E-01	2.41E-03	1.72E-03	4.21E-01	2.95E+00	2.95E+00	2
267	10.904	37.540	4	2.00E-03	4.76E-01	2.80E-03	2.00E-03	4.76E-01	3.33E+00	3.34E+00	3
268	10.713	37.514	5	2.02E-03	4.89E-01	2.83E-03	2.02E-03	4.89E-01	3.43E+00	3.43E+00	3
269	10.804	37.388	2	1.92E-03	4.62E-01	2.69E-03	1.92E-03	4.62E-01	3.24E+00	3.24E+00	3
270	10.922	37.125	2	1.44E-03	3.92E-01	2.02E-03	1.44E-03	3.92E-01	2.75E+00	2.75E+00	2
271	10.540	44.432	3	1.08E-01	2.47E+00	1.51E-01	1.08E-01	2.47E+00	1.74E+01	1.76E+01	5
272	10.544	44.527	3	1.15E-01	2.52E+00	1.61E-01	1.15E-01	2.52E+00	1.78E+01	1.80E+01	5
273	10.911	37.396	4	1.84E-03	4.55E-01	2.58E-03	1.84E-03	4.55E-01	3.19E+00	3.19E+00	3
274	10.911	37.542	4	1.96E-03	4.75E-01	2.74E-03	1.96E-03	4.75E-01	3.33E+00	3.33E+00	3
275	11.070	37.587	4	1.19E-03	4.63E-01	1.67E-03	1.19E-03	4.63E-01	3.24E+00	3.24E+00	3
276	10.945	37.696	4	1.95E-03	5.01E-01	2.73E-03	1.95E-03	5.01E-01	3.51E+00	3.51E+00	3
277	10.726	37.727	1	2.18E-03	5.31E-01	3.05E-03	2.18E-03	5.31E-01	3.72E+00	3.72E+00	3
278	10.760	37.219	1	1.79E-03	4.38E-01	2.51E-03	1.79E-03	4.38E-01	3.07E+00	3.07E+00	3
279	10.984	37.216	1	1.06E-03	4.17E-01	1.48E-03	1.06E-03	4.17E-01	2.92E+00	2.92E+00	2
280	11.117	37.373	2	4.61E-04	4.19E-01	6.45E-04	4.61E-04	4.19E-01	2.93E+00	2.93E+00	2
281	10.432	37.409	2	1.93E-03	4.72E-01	2.70E-03	1.93E-03	4.72E-01	3.31E+00	3.31E+00	3
282	10.763	37.514	2	2.02E-03	4.85E-01	2.83E-03	2.02E-03	4.85E-01	3.40E+00	3.40E+00	3
284	10.744	37.636	4	2.11E-03	5.08E-01	2.95E-03	2.11E-03	5.08E-01	3.56E+00	3.56E+00	3
291	11.500	47.434	2	1.58E-01	3.59E+00	2.21E-01	1.58E-01	3.59E+00	2.54E+01	2.56E+01	5
293	8.543	47.116	5	2.51E-02	1.08E+00	3.51E-02	2.51E-02	1.08E+00	7.60E+00	7.63E+00	4
294	8.467	47.115	5	1.80E-02	9.21E-01	2.52E-02	1.80E-02	9.21E-01	6.47E+00	6.50E+00	4
295	8.492	47.117	5	2.00E-02	9.75E-01	2.80E-02	2.00E-02	9.75E-01	6.85E+00	6.88E+00	4
296	8.516	47.115	5	2.23E-02	1.02E+00	3.12E-02	2.23E-02	1.02E+00	7.17E+00	7.20E+00	4
301	8.813	49.005	4	9.48E-02	2.28E+00	1.33E-01	9.48E-02	2.28E+00	1.61E+01	1.62E+01	5
302	8.698	48.995	4	6.97E-02	1.86E+00	9.76E-02	6.97E-02	1.86E+00	1.31E+01	1.32E+01	4
303	8.586	48.990	4	5.11E-02	1.54E+00	7.15E-02	5.11E-02	1.54E+00	1.09E+01	1.09E+01	4
308	9.155	50.350	4	1.19E-01	4.70E+00	1.67E-01	1.19E-01	4.70E+00	3.31E+01	3.32E+01	6
309	12.555	50.431	4	4.53E-02	1.51E+00	6.34E-02	4.53E-02	1.51E+00	1.06E+01	1.07E+01	4
319	10.888	37.255	8	1.82E-03	4.37E-01	2.55E-03	1.82E-03	4.37E-01	3.06E+00	3.06E+00	3
320	10.938	37.620	4	1.89E-03	4.85E-01	2.65E-03	1.89E-03	4.85E-01	3.40E+00	3.40E+00	3
321	11.039	37.195	1	5.40E-04	4.03E-01	7.56E-04	5.40E-04	4.03E-01	2.82E+00	2.82E+00	2
322	10.479	37.545	4	2.03E-03	5.05E-01	2.84E-03	2.03E-03	5.05E-01	3.54E+00	3.54E+00	3
323	10.463	37.224	3	1.80E-03	4.33E-01	2.52E-03	1.80E-03	4.33E-01	3.03E+00	3.04E+00	3
324	10.531	37.427	3	1.95E-03	4.79E-01	2.73E-03	1.95E-03	4.79E-01	3.36E+00	3.36E+00	3
325	10.510	37.141	14	1.65E-03	4.05E-01	2.31E-03	1.65E-03	4.05E-01	2.84E+00	2.84E+00	2
344	12.300	47.428	5	5.42E-02	1.59E+00	7.59E-02	5.42E-02	1.59E+00	1.12E+01	1.13E+01	4
345	12.133	47.423	5	7.73E-02	1.97E+00	1.08E-01	7.73E-02	1.97E+00	1.39E+01	1.40E+01	4
346	12.468	47.416	5	3.56E-02	1.22E+00	4.98E-02	3.56E-02	1.22E+00	8.59E+00	8.64E+00	4
347	7.753	50.700	5	2.10E-07	5.17E-02	2.94E-07	2.10E-07	5.17E-02	3.62E-01	3.62E-01	2
348	7.928	50.753	5	3.33E-04	2.50E-01	4.66E-04	3.33E-04	2.50E-01	1.75E+00	1.75E+00	2
349	8.115	50.670	5	3.42E-03	5.52E-01	4.79E-03	3.42E-03	5.52E-01	3.87E+00	3.87E+00	3
350	8.732	50.500	5	1.04E-01	2.49E+00	1.46E-01	1.04E-01	2.49E+00	1.76E+01	1.77E+01	5
351	8.904	50.514	5	1.77E-01	3.36E+00	2.48E-01	1.77E-01	3.36E+00	2.38E+01	2.40E+01	5
352	9.050	50.473	5	1.45E-01	4.18E+00	2.03E-01	1.45E-01	4.18E+00	2.95E+01	2.97E+01	5
353	9.692	50.529	5	8.58E-02	8.54E+00	1.20E-01	8.58E-02	8.54E+00	5.99E+01	6.00E+01	7
354	9.773	50.620	5	1.10E-01	9.26E+00	1.54E-01	1.10E-01	9.26E+00	6.50E+01	6.51E+01	7
355	11.345	50.611	5	9.64E-02	9.04E+00	1.35E-01	9.64E-02	9.04E+00	6.34E+01	6.35E+01	7
356	10.024	50.567	5	1.50E-01	1.06E+01	2.10E-01	1.50E-01	1.06E+01	7.44E+01	7.46E+01	7
357	11.624	50.617	5	1.02E-01	7.01E+00	1.43E-01	1.02E-01	7.01E+00	4.92E+01	4.94E+01	6
358	11.743	50.608	5	1.42E-01	6.13E+00	1.99E-01	1.42E-01	6.13E+00	4.31E+01	4.33E+01	6
359	12.536	50.676	5	4.94E-02	1.60E+00	6.92E-02	4.94E-02	1.60E+00	1.13E+01	1.13E+01	4
360	12.789	50.679	5	1.12E-02	7.91E-01	1.57E-02	1.12E-02	7.91E-01	5.55E+00	5.57E+00	3
361	12.893	50.650	5	3.86E-03	5.82E-01	5.40E-03	3.86E-03	5.82E-01	4.08E+00	4.08E+00	3
Case 2: Protected 2 rounds at aimpoint (8.95, 47.50)											
23	8.542	46.954	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E+00	1.62E+01	1.62E+01	5
24	8.524	46.961	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E+00	1.46E+01	1.46E+01	4
26	8.467	46.959	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-01	3.25E+00	3.25E+00	3
28	8.488	46.960	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E+00	7.35E+00	7.35E+00	4

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

129	8.527	47.021	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E+00	2.35E+01	2.35E+01	5
221	8.456	47.003	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-01	1.85E+00	1.85E+00	2
222	8.469	47.067	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-01	5.69E+00	5.69E+00	3
223	8.521	47.070	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E+00	2.12E+01	2.12E+01	5
224	8.494	47.075	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E+00	1.32E+01	1.32E+01	4
256	8.601	46.901	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E+00	1.51E+01	1.51E+01	5
259	8.572	46.898	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-01	6.71E+00	6.71E+00	4
293	8.543	47.116	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E+00	2.34E+01	2.34E+01	5
294	8.467	47.115	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-01	4.33E+00	4.33E+00	3
295	8.492	47.117	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E+00	1.04E+01	1.04E+01	4
296	8.516	47.115	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E+00	1.68E+01	1.68E+01	5

VX 500kg TBM
Heavy Attack
Height of Release: 800m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 4 rounds at aimpoint (11.70, 59.90)											
3	11.844	47.063	4	2.82E+00	6.93E+01	3.95E+00	2.82E+00	6.93E+01	4.89E+02	4.93E+02	8
4	11.522	47.053	4	1.90E+00	4.59E+01	2.66E+00	1.90E+00	4.59E+01	3.24E+02	3.27E+02	8
5	11.662	47.449	4	2.42E+00	5.89E+01	3.39E+00	2.42E+00	5.89E+01	4.16E+02	4.19E+02	8
6	11.753	47.449	4	2.67E+00	6.61E+01	3.74E+00	2.67E+00	6.61E+01	4.66E+02	4.70E+02	8
7	11.842	47.452	4	2.83E+00	7.03E+01	3.96E+00	2.83E+00	7.03E+01	4.96E+02	5.00E+02	8
8	11.915	47.462	4	2.89E+00	7.08E+01	4.05E+00	2.89E+00	7.08E+01	5.00E+02	5.04E+02	8
9	11.139	47.431	4	6.94E-01	1.55E+01	9.72E-01	6.94E-01	1.55E+01	1.09E+02	1.10E+02	8
10	11.045	47.442	4	4.76E-01	1.01E+01	6.66E-01	4.76E-01	1.01E+01	7.14E+01	7.20E+01	7
11	11.250	47.445	4	1.02E+00	2.32E+01	1.43E+00	1.02E+00	2.32E+01	1.64E+02	1.65E+02	8
12	11.341	47.435	4	1.30E+00	3.03E+01	1.82E+00	1.30E+00	3.03E+01	2.14E+02	2.16E+02	8
15	11.948	44.446	3	2.34E+00	4.99E+01	3.28E+00	2.34E+00	4.99E+01	3.53E+02	3.56E+02	8
16	11.847	44.587	2	2.43E+00	5.23E+01	3.40E+00	2.43E+00	5.23E+01	3.70E+02	3.73E+02	8
17	11.466	46.869	2	1.73E+00	4.09E+01	2.42E+00	1.73E+00	4.09E+01	2.89E+02	2.91E+02	8
18	11.521	46.841	2	1.92E+00	4.58E+01	2.69E+00	1.92E+00	4.58E+01	3.23E+02	3.26E+02	8
32	11.792	44.548	2	2.37E+00	5.14E+01	3.32E+00	2.37E+00	5.14E+01	3.63E+02	3.66E+02	8
33	11.948	44.446	1	2.34E+00	4.99E+01	3.28E+00	2.34E+00	4.99E+01	3.53E+02	3.56E+02	8
34	11.896	44.456	2	2.44E+00	5.15E+01	3.42E+00	2.44E+00	5.15E+01	3.64E+02	3.67E+02	8
35	11.755	44.396	2	2.29E+00	4.89E+01	3.21E+00	2.29E+00	4.89E+01	3.46E+02	3.49E+02	8
36	11.773	44.474	1	2.33E+00	5.01E+01	3.26E+00	2.33E+00	5.01E+01	3.54E+02	3.57E+02	8
37	11.849	44.493	2	2.41E+00	5.16E+01	3.37E+00	2.41E+00	5.16E+01	3.65E+02	3.68E+02	8
38	10.930	37.318	2	2.27E-01	3.58E+00	3.18E-01	2.27E-01	3.58E+00	2.54E+01	2.57E+01	5
39	11.857	44.366	2	2.38E+00	5.05E+01	3.33E+00	2.38E+00	5.05E+01	3.57E+02	3.60E+02	8
40	10.797	37.297	5	1.69E-01	2.27E+00	2.37E-01	1.69E-01	2.27E+00	1.61E+01	1.64E+01	5
41	11.940	44.365	2	2.33E+00	4.95E+01	3.26E+00	2.33E+00	4.95E+01	3.50E+02	3.53E+02	8
42	11.953	44.514	2	2.35E+00	5.03E+01	3.29E+00	2.35E+00	5.03E+01	3.55E+02	3.59E+02	8
43	10.744	37.401	1	1.61E-01	1.83E+00	2.25E-01	1.61E-01	1.83E+00	1.30E+01	1.33E+01	4
44	10.463	37.339	2	4.28E-02	5.54E-01	5.99E-02	4.28E-02	5.54E-01	3.94E+00	4.00E+00	3
45	10.904	37.401	1	1.97E-01	3.15E+00	2.76E-01	1.97E-01	3.15E+00	2.23E+01	2.26E+01	5
46	10.857	37.427	1	1.84E-01	2.73E+00	2.58E-01	1.84E-01	2.73E+00	1.94E+01	1.96E+01	5
47	10.948	37.639	2	2.47E-01	3.82E+00	3.46E-01	2.47E-01	3.82E+00	2.71E+01	2.74E+01	5
50	11.790	47.141	2	2.73E+00	6.80E+01	3.82E+00	2.73E+00	6.80E+01	4.80E+02	4.84E+02	8
51	10.624	44.475	2	3.91E-02	6.13E-01	5.47E-02	3.91E-02	6.13E-01	4.35E+00	4.40E+00	3
52	10.631	44.733	2	4.02E-02	6.46E-01	5.63E-02	4.02E-02	6.46E-01	4.58E+00	4.63E+00	3
53	11.247	46.908	2	1.03E+00	2.31E+01	1.44E+00	1.03E+00	2.31E+01	1.63E+02	1.65E+02	8
54	10.749	44.438	2	9.73E-02	1.79E+00	1.36E-01	9.73E-02	1.79E+00	1.27E+01	1.28E+01	4
66	11.938	44.438	2	2.36E+00	5.02E+01	3.30E+00	2.36E+00	5.02E+01	3.55E+02	3.58E+02	8
71	10.792	37.756	1	1.67E-01	2.16E+00	2.34E-01	1.67E-01	2.16E+00	1.54E+01	1.56E+01	5
72	10.794	37.683	1	1.69E-01	2.19E+00	2.37E-01	1.69E-01	2.19E+00	1.56E+01	1.58E+01	5
73	10.841	37.206	1	1.78E-01	2.65E+00	2.49E-01	1.78E-01	2.65E+00	1.88E+01	1.90E+01	5
98	12.188	47.396	4	1.81E+00	4.36E+01	2.53E+00	1.81E+00	4.36E+01	3.08E+02	3.10E+02	8
99	12.240	47.476	4	1.51E+00	3.63E+01	2.11E+00	1.51E+00	3.63E+01	2.56E+02	2.58E+02	8
100	12.353	47.466	4	9.55E-01	2.17E+01	1.34E+00	9.55E-01	2.17E+01	1.53E+02	1.55E+02	8
101	12.416	47.419	4	7.13E-01	1.50E+01	9.98E-01	7.13E-01	1.50E+01	1.06E+02	1.07E+02	8
102	12.489	50.495	3	2.64E-01	6.71E+00	3.70E-01	2.64E-01	6.71E+00	4.73E+01	4.77E+01	6

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

104	12.834	50.654	4	4.08E-03	0.00E+00	5.71E-03	4.08E-03	0.00E+00	5.71E-03	1.14E-02	1
106	12.671	50.683	4	4.09E-02	4.04E-01	5.73E-02	4.09E-02	4.04E-01	2.89E+00	2.94E+00	2
108	12.738	50.667	4	9.72E-03	9.21E-03	1.36E-02	9.72E-03	9.21E-03	7.81E-02	9.17E-02	1
109	12.599	50.677	4	1.14E-01	1.42E+00	1.60E-01	1.14E-01	1.42E+00	1.01E+01	1.03E+01	4
112	11.555	50.608	4	2.25E+00	6.52E+01	3.15E+00	2.25E+00	6.52E+01	4.60E+02	4.63E+02	8
113	11.396	50.608	4	1.61E+00	4.66E+01	2.25E+00	1.61E+00	4.66E+01	3.28E+02	3.31E+02	8
114	11.475	50.622	4	1.88E+00	5.50E+01	2.63E+00	1.88E+00	5.50E+01	3.88E+02	3.90E+02	8
115	11.688	50.601	4	2.95E+00	8.71E+01	4.13E+00	2.95E+00	8.71E+01	6.14E+02	6.18E+02	8
120	12.896	53.002	5	6.98E-07	0.00E+00	9.77E-07	6.98E-07	0.00E+00	9.77E-07	1.95E-06	1
124	11.803	44.430	6	2.34E+00	5.08E+01	3.28E+00	2.34E+00	5.08E+01	3.59E+02	3.62E+02	8
125	11.841	44.433	4	2.38E+00	5.10E+01	3.33E+00	2.38E+00	5.10E+01	3.60E+02	3.64E+02	8
130	10.865	37.347	3	1.85E-01	2.82E+00	2.59E-01	1.85E-01	2.82E+00	2.00E+01	2.03E+01	5
131	10.823	37.519	2	1.78E-01	2.44E+00	2.49E-01	1.78E-01	2.44E+00	1.73E+01	1.76E+01	5
135	10.812	37.913	2	1.70E-01	2.29E+00	2.38E-01	1.70E-01	2.29E+00	1.63E+01	1.65E+01	5
136	11.504	46.883	3	1.85E+00	4.42E+01	2.59E+00	1.85E+00	4.42E+01	3.12E+02	3.15E+02	8
137	11.421	46.891	3	1.58E+00	3.70E+01	2.21E+00	1.58E+00	3.70E+01	2.61E+02	2.63E+02	8
140	10.945	37.527	2	2.43E-01	3.78E+00	3.40E-01	2.43E-01	3.78E+00	2.68E+01	2.71E+01	5
141	10.896	37.670	2	1.95E-01	3.00E+00	2.73E-01	1.95E-01	3.00E+00	2.13E+01	2.15E+01	5
142	10.870	37.693	2	1.89E-01	2.79E+00	2.65E-01	1.89E-01	2.79E+00	1.98E+01	2.01E+01	5
143	10.531	44.636	2	9.39E-03	1.29E-01	1.31E-02	9.39E-03	1.29E-01	9.16E-01	9.29E-01	2
144	11.197	46.981	8	8.84E-01	1.94E+01	1.24E+00	8.84E-01	1.94E+01	1.37E+02	1.38E+02	8
145	11.255	47.090	8	1.06E+00	2.37E+01	1.48E+00	1.06E+00	2.37E+01	1.67E+02	1.69E+02	8
146	11.275	46.996	8	1.11E+00	2.52E+01	1.55E+00	1.11E+00	2.52E+01	1.78E+02	1.80E+02	8
147	10.670	44.618	8	5.16E-02	9.55E-01	7.22E-02	5.16E-02	9.55E-01	6.76E+00	6.83E+00	4
149	10.678	44.506	3	5.57E-02	1.02E+00	7.80E-02	5.57E-02	1.02E+00	7.22E+00	7.30E+00	4
150	10.733	44.618	8	8.40E-02	1.59E+00	1.18E-01	8.40E-02	1.59E+00	1.12E+01	1.14E+01	4
152	12.856	50.355	6	4.53E-03	0.00E+00	6.34E-03	4.53E-03	0.00E+00	6.34E-03	1.27E-02	1
157	11.070	37.707	2	3.77E-01	5.78E+00	5.28E-01	3.77E-01	5.78E+00	4.10E+01	4.15E+01	6
161	11.135	47.004	2	7.04E-01	1.54E+01	9.86E-01	7.04E-01	1.54E+01	1.09E+02	1.10E+02	8
166	10.631	44.556	8	4.05E-02	6.61E-01	5.67E-02	4.05E-02	6.61E-01	4.68E+00	4.74E+00	3
167	11.875	44.589	3	2.46E+00	5.25E+01	3.44E+00	2.46E+00	5.25E+01	3.71E+02	3.74E+02	8
180	10.677	38.512	4	1.03E-01	1.19E+00	1.44E-01	1.03E-01	1.19E+00	8.47E+00	8.62E+00	4
181	11.428	38.418	4	8.28E-01	1.40E+01	1.16E+00	8.28E-01	1.40E+01	9.92E+01	1.00E+02	8
182	10.160	38.142	4	7.84E-06	0.00E+00	1.10E-05	7.84E-06	0.00E+00	1.10E-05	2.20E-05	1
185	12.438	50.621	2	5.05E-01	1.14E+01	7.07E-01	5.05E-01	1.14E+01	8.05E+01	8.12E+01	8
188	12.807	52.968	3	1.66E-05	0.00E+00	2.32E-05	1.66E-05	0.00E+00	2.32E-05	4.65E-05	1
190	10.571	44.446	8	2.26E-02	3.07E-01	3.16E-02	2.26E-02	3.07E-01	2.18E+00	2.21E+00	2
255	11.809	47.158	7	2.76E+00	6.89E+01	3.86E+00	2.76E+00	6.89E+01	4.86E+02	4.90E+02	8
263	11.107	37.193	2	4.30E-01	6.37E+00	6.02E-01	4.30E-01	6.37E+00	4.52E+01	4.58E+01	6
264	11.055	37.800	6	3.57E-01	5.53E+00	5.00E-01	3.57E-01	5.53E+00	3.92E+01	3.97E+01	6
265	11.023	37.399	3	3.34E-01	5.04E+00	4.68E-01	3.34E-01	5.04E+00	3.57E+01	3.62E+01	6
266	10.804	37.172	5	1.67E-01	2.35E+00	2.34E-01	1.67E-01	2.35E+00	1.67E+01	1.69E+01	5
267	10.904	37.540	4	1.97E-01	3.12E+00	2.76E-01	1.97E-01	3.12E+00	2.21E+01	2.24E+01	5
268	10.713	37.514	5	1.59E-01	1.57E+00	2.23E-01	1.59E-01	1.57E+00	1.12E+01	1.14E+01	4
269	10.804	37.388	2	1.73E-01	2.31E+00	2.42E-01	1.73E-01	2.31E+00	1.64E+01	1.67E+01	5
270	10.922	37.125	2	2.20E-01	3.49E+00	3.08E-01	2.20E-01	3.49E+00	2.47E+01	2.50E+01	5
271	10.540	44.432	3	1.28E-02	1.74E-01	1.79E-02	1.28E-02	1.74E-01	1.24E+00	1.25E+00	2
272	10.544	44.527	3	1.37E-02	1.88E-01	1.92E-02	1.37E-02	1.88E-01	1.34E+00	1.35E+00	2
273	10.911	37.396	4	2.05E-01	3.26E+00	2.87E-01	2.05E-01	3.26E+00	2.31E+01	2.34E+01	5
274	10.911	37.542	4	2.05E-01	3.23E+00	2.87E-01	2.05E-01	3.23E+00	2.29E+01	2.32E+01	5
275	11.070	37.587	4	3.84E-01	5.79E+00	5.38E-01	3.84E-01	5.79E+00	4.11E+01	4.16E+01	6
276	10.945	37.696	4	2.45E-01	3.76E+00	3.43E-01	2.45E-01	3.76E+00	2.67E+01	2.70E+01	5
277	10.726	37.727	1	1.49E-01	1.64E+00	2.09E-01	1.49E-01	1.64E+00	1.17E+01	1.19E+01	4
278	10.760	37.219	1	1.57E-01	1.98E+00	2.20E-01	1.57E-01	1.98E+00	1.41E+01	1.43E+01	4
279	10.984	37.216	1	2.91E-01	4.44E+00	4.07E-01	2.91E-01	4.44E+00	3.15E+01	3.19E+01	6
280	11.117	37.373	2	4.39E-01	6.58E+00	6.15E-01	4.39E-01	6.58E+00	4.67E+01	4.73E+01	6
281	10.432	37.409	2	3.17E-02	4.42E-01	4.44E-02	3.17E-02	4.42E-01	3.14E+00	3.18E+00	3
282	10.763	37.514	2	1.68E-01	1.97E+00	2.35E-01	1.68E-01	1.97E+00	1.40E+01	1.43E+01	4
284	10.744	37.636	4	1.58E-01	1.80E+00	2.21E-01	1.58E-01	1.80E+00	1.28E+01	1.30E+01	4
291	11.500	47.434	2	1.82E+00	4.37E+01	2.55E+00	1.82E+00	4.37E+01	3.08E+02	3.11E+02	8
309	12.555	50.431	4	1.57E-01	3.47E+00	2.20E-01	1.57E-01	3.47E+00	2.45E+01	2.47E+01	5
319	10.888	37.255	8	1.90E-01	3.02E+00	2.66E-01	1.90E-01	3.02E+00	2.14E+01	2.17E+01	5
320	10.938	37.620	4	2.36E-01	3.66E+00	3.30E-01	2.36E-01	3.66E+00	2.60E+01	2.63E+01	5
321	11.039	37.195	1	3.54E-01	5.30E+00	4.96E-01	3.54E-01	5.30E+00	3.76E+01	3.81E+01	6
322	10.479	37.545	4	3.60E-02	5.69E-01	5.04E-02	3.60E-02	5.69E-01	4.03E+00	4.08E+00	3
323	10.463	37.224	3	5.07E-02	5.73E-01	7.10E-02	5.07E-02	5.73E-01	4.08E+00	4.15E+00	3
324	10.531	37.427	3	6.13E-02	7.85E-01	8.58E-02	6.13E-02	7.85E-01	5.58E+00	5.67E+00	3

Table D4
VX Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

325	10.510	37.141	14	6.85E-02	7.44E-01	9.59E-02	6.85E-02	7.44E-01	5.30E+00	5.40E+00	3
344	12.300	47.428	5	1.16E+00	2.80E+01	1.62E+00	1.16E+00	2.80E+01	1.98E+02	1.99E+02	8
345	12.133	47.423	5	2.14E+00	5.15E+01	3.00E+00	2.14E+00	5.15E+01	3.63E+02	3.66E+02	8
346	12.468	47.416	5	5.14E-01	1.09E+01	7.20E-01	5.14E-01	1.09E+01	7.70E+01	7.77E+01	8
355	11.345	50.611	5	1.43E+00	4.12E+01	2.00E+00	1.43E+00	4.12E+01	2.90E+02	2.92E+02	8
357	11.624	50.617	5	2.61E+00	7.58E+01	3.65E+00	2.61E+00	7.58E+01	5.34E+02	5.38E+02	8
358	11.743	50.608	5	3.21E+00	9.68E+01	4.49E+00	3.21E+00	9.68E+01	6.82E+02	6.87E+02	8
359	12.536	50.676	5	1.78E-01	3.98E+00	2.49E-01	1.78E-01	3.98E+00	2.81E+01	2.84E+01	5
360	12.789	50.679	5	6.48E-03	1.04E-03	9.07E-03	6.48E-03	1.04E-03	1.64E-02	2.54E-02	1
361	12.893	50.650	5	4.41E-04	0.00E+00	6.17E-04	4.41E-04	0.00E+00	6.17E-04	1.23E-03	1
Case 2: Protected 4 rounds at aimpoint (10.50, 39.45)											
38	10.930	37.318	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-01	1.43E+00	1.43E+00	2
40	10.797	37.297	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E+00	2.39E+01	2.39E+01	5
43	10.744	37.401	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E+01	9.24E+01	9.24E+01	8
44	10.463	37.339	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-02	3.45E-01	3.45E-01	2
45	10.904	37.401	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E+00	7.28E+00	7.28E+00	4
46	10.857	37.427	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E+00	6.17E+01	6.17E+01	7
47	10.948	37.639	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-01	1.51E+00	1.51E+00	2
71	10.792	37.756	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E+01	4.91E+02	4.91E+02	8
72	10.794	37.683	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E+01	5.78E+02	5.78E+02	8
130	10.865	37.347	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E+00	2.85E+01	2.85E+01	5
131	10.823	37.519	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E+01	2.63E+02	2.63E+02	8
135	10.812	37.913	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E+01	3.63E+02	3.63E+02	8
140	10.945	37.527	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-01	2.16E+00	2.16E+00	2
141	10.896	37.670	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E+01	7.77E+01	7.77E+01	8
142	10.870	37.693	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E+01	3.34E+02	3.34E+02	8
182	10.160	38.142	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E+01	1.90E+02	1.90E+02	8
267	10.904	37.540	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E+00	2.16E+01	2.16E+01	5
268	10.713	37.514	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E+01	1.83E+02	1.83E+02	8
269	10.804	37.388	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E+00	6.76E+01	6.76E+01	7
273	10.911	37.396	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-01	5.97E+00	5.97E+00	3
274	10.911	37.542	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E+00	1.85E+01	1.85E+01	5
276	10.945	37.696	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-01	3.14E+00	3.14E+00	3
277	10.726	37.727	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E+01	4.60E+02	4.60E+02	8
282	10.763	37.514	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E+01	3.14E+02	3.14E+02	8
284	10.744	37.636	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.48E+01	6.64E+02	6.64E+02	8
319	10.888	37.255	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-02	6.76E-01	6.76E-01	2
320	10.938	37.620	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+00	8.40E+00	8.40E+00	4
323	10.463	37.224	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.72E-02	5.40E-01	5.40E-01	2
324	10.531	37.427	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E+00	6.45E+01	6.45E+01	7
325	10.510	37.141	14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E+00	1.33E+01	1.33E+01	4

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

Mustard (HD) 152mm Artillery
Light Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (8.50, 47.20)									
23	8.542	46.954	2	1.11E+02	4.97E+02	8.21E+02	5	4	6
24	8.524	46.961	2	1.14E+01	1.14E+01	2.77E+01	2	1	2
26	8.467	46.959	2	2.66E+01	3.75E+01	8.02E+01	2	1	2
28	8.488	46.960	2	5.68E+01	2.23E+02	3.75E+02	3	2	4
129	8.527	47.021	8	6.43E+01	2.78E+01	1.04E+02	3	2	3
221	8.456	47.003	4	1.36E+01	5.39E+01	9.06E+01	2	1	2
222	8.469	47.067	4	1.59E+02	1.55E+02	3.80E+02	6	5	4
223	8.521	47.070	4	2.16E+02	1.08E+02	3.70E+02	6	5	4
224	8.494	47.075	4	2.15E+02	1.39E+02	4.14E+02	6	5	4
256	8.601	46.901	2	5.24E-02	2.48E+00	3.60E+00	1	1	1
259	8.572	46.898	3	1.27E+01	6.54E+01	1.06E+02	2	1	3
293	8.543	47.116	5	4.55E+02	4.37E+03	6.70E+03	6	6	8
294	8.467	47.115	5	1.76E+02	3.93E+02	7.37E+02	6	5	5
295	8.492	47.117	5	3.65E+02	7.07E+02	1.38E+03	6	6	6
296	8.516	47.115	5	5.78E+02	1.80E+03	3.15E+03	6	6	7

**Case 2a: Protected (Eye,
Respiratory Exposure)**

18 rounds at aimpoint (6.75, 41.10)									
60	6.802	41.162	6	8.32E-03	1.58E+02	8.32E-03	1	1	
61	6.769	41.109	5	1.68E-05	0.00E+00	1.68E-05	1	1	
63	6.726	41.115	3	5.33E-05	2.05E+00	5.33E-05	1	1	
67	6.701	41.166	3	1.50E-03	1.78E+00	1.50E-03	1	1	
68	6.713	41.070	4	3.66E-01	7.52E+02	3.66E-01	1	1	
134	6.730	41.157	4	6.93E-06	4.68E-01	6.93E-06	1	1	
283	6.795	41.101	4	5.29E-02	4.97E+02	5.29E-02	1	1	

**Case 2b: Protected (Skin
Exposure)**

18 rounds at aimpoint (6.75, 41.10)									
60	6.802	41.162	6	1.29E-01	4.52E+02	6.46E+02			5
61	6.769	41.109	5	2.75E-04	0.00E+00	2.75E-04			1
63	6.726	41.115	3	7.29E-04	5.87E+00	8.39E+00			1
67	6.701	41.166	3	2.29E-02	5.09E+00	7.29E+00			1
68	6.713	41.070	4	4.70E+00	2.15E+03	3.08E+03			7
134	6.730	41.157	4	1.05E-04	1.34E+00	1.91E+00			1
283	6.795	41.101	4	6.22E-01	1.42E+03	2.03E+03			7

Mustard (HD) MRLS
Moderate Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (10.75, 44.65)									
38	10.930	37.318	2	8.70E+00	0.00E+00	8.70E+00	2	1	1
40	10.797	37.297	5	8.21E+00	0.00E+00	8.21E+00	2	1	1
43	10.744	37.401	1	1.18E+01	0.00E+00	1.18E+01	2	1	1
44	10.463	37.339	2	3.43E+00	0.00E+00	3.43E+00	1	1	1
45	10.904	37.401	1	1.07E+01	0.00E+00	1.07E+01	2	1	1
46	10.857	37.427	1	1.10E+01	0.00E+00	1.10E+01	2	1	1
47	10.948	37.639	2	1.72E+01	0.00E+00	1.72E+01	2	1	1
51	10.624	44.475	2	2.81E+02	7.25E+02	1.32E+03	6	6	6
54	10.749	44.438	2	4.12E+02	9.54E+02	1.77E+03	6	6	7
71	10.792	37.756	1	2.10E+01	0.00E+00	2.10E+01	2	1	1
72	10.794	37.683	1	1.90E+01	0.00E+00	1.90E+01	2	1	1
73	10.841	37.206	1	5.39E+00	0.00E+00	5.39E+00	2	1	1
130	10.865	37.347	3	8.86E+00	0.00E+00	8.86E+00	2	1	1
131	10.823	37.519	2	1.40E+01	0.00E+00	1.40E+01	2	1	1
135	10.812	37.913	2	2.46E+01	0.00E+00	2.46E+01	2	1	1
140	10.945	37.527	2	1.46E+01	0.00E+00	1.46E+01	2	1	1
141	10.896	37.670	2	1.77E+01	0.00E+00	1.77E+01	2	1	1
142	10.870	37.693	2	1.79E+01	0.00E+00	1.79E+01	2	1	1
143	10.531	44.636	2	9.49E+00	0.00E+00	9.49E+00	2	1	1

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

147	10.670	44.618	8	7.02E+01	4.37E+02	6.94E+02	4	3	5
149	10.678	44.506	3	1.64E+02	5.34E+02	9.27E+02	6	5	6
150	10.733	44.618	8	7.72E+01	1.30E+01	9.58E+01	4	3	2
157	11.070	37.707	2	7.25E+00	0.00E+00	7.25E+00	2	1	1
166	10.631	44.556	8	1.50E+02	8.87E+01	2.77E+02	6	5	4
180	10.677	38.512	4	4.30E+01	0.00E+00	4.30E+01	2	1	2
190	10.571	44.446	8	2.19E+02	7.02E+02	1.22E+03	6	5	6
263	11.107	37.193	2	4.72E-01	0.00E+00	4.72E-01	1	1	1
264	11.055	37.800	6	1.03E+01	0.00E+00	1.03E+01	2	1	1
265	11.023	37.399	3	7.44E+00	0.00E+00	7.44E+00	2	1	1
266	10.804	37.172	5	5.10E+00	0.00E+00	5.10E+00	2	1	1
267	10.904	37.540	4	1.44E+01	0.00E+00	1.44E+01	2	1	1
268	10.713	37.514	5	1.53E+01	0.00E+00	1.53E+01	2	1	1
269	10.804	37.388	2	1.09E+01	0.00E+00	1.09E+01	2	1	1
270	10.922	37.125	2	4.14E+00	0.00E+00	4.14E+00	1	1	1
271	10.540	44.432	3	1.30E+02	5.63E+02	9.34E+02	5	4	6
272	10.544	44.527	3	8.30E+01	1.55E+01	1.05E+02	4	3	3
273	10.911	37.396	4	1.06E+01	0.00E+00	1.06E+01	2	1	1
274	10.911	37.542	4	1.46E+01	0.00E+00	1.46E+01	2	1	1
275	11.070	37.587	4	5.85E+00	0.00E+00	5.85E+00	2	1	1
276	10.945	37.696	4	1.86E+01	0.00E+00	1.86E+01	2	1	1
277	10.726	37.727	1	2.18E+01	0.00E+00	2.18E+01	2	1	1
278	10.760	37.219	1	6.77E+00	0.00E+00	6.77E+00	2	1	1
279	10.984	37.216	1	5.38E+00	0.00E+00	5.38E+00	2	1	1
280	11.117	37.373	2	1.10E+00	0.00E+00	1.10E+00	1	1	1
281	10.432	37.409	2	2.57E+00	0.00E+00	2.57E+00	1	1	1
282	10.763	37.514	2	1.49E+01	0.00E+00	1.49E+01	2	1	1
284	10.744	37.636	4	1.89E+01	0.00E+00	1.89E+01	2	1	1
319	10.888	37.255	8	6.42E+00	0.00E+00	6.42E+00	2	1	1
320	10.938	37.620	4	1.67E+01	0.00E+00	1.67E+01	2	1	1
321	11.039	37.195	1	3.09E+00	0.00E+00	3.09E+00	1	1	1
322	10.479	37.545	4	6.71E+00	0.00E+00	6.71E+00	2	1	1
323	10.463	37.224	3	2.21E+00	0.00E+00	2.21E+00	1	1	1
324	10.531	37.427	3	7.71E+00	0.00E+00	7.71E+00	2	1	1
325	10.510	37.141	14	2.56E+00	0.00E+00	2.56E+00	1	1	1

240 rounds at aimpoint (10.75, 39.80)

180	10.677	38.512	4	4.11E+00	0.00E+00	4.11E+00	1	1	
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240 rounds at aimpoint (10.75, 39.80)

38	10.930	37.318	2	6.02E+01	0.00E+00	6.02E+01			2
40	10.797	37.297	5	5.62E+01	0.00E+00	5.62E+01			2
43	10.744	37.401	1	8.23E+01	0.00E+00	8.23E+01			2
44	10.463	37.339	2	2.38E+01	0.00E+00	2.38E+01			1
45	10.904	37.401	1	7.40E+01	0.00E+00	7.40E+01			2
46	10.857	37.427	1	7.16E+01	0.00E+00	7.16E+01			2
47	10.948	37.639	2	1.05E+02	0.00E+00	1.05E+02			3
71	10.792	37.756	1	1.09E+02	0.00E+00	1.09E+02			3
72	10.794	37.683	1	1.04E+02	0.00E+00	1.04E+02			3
73	10.841	37.206	1	3.75E+01	0.00E+00	3.75E+01			2
130	10.865	37.347	3	6.08E+01	0.00E+00	6.08E+01			2
131	10.823	37.519	2	8.45E+01	0.00E+00	8.45E+01			2
135	10.812	37.913	2	1.08E+02	0.00E+00	1.08E+02			3
140	10.945	37.527	2	9.29E+01	0.00E+00	9.29E+01			2
141	10.896	37.670	2	1.01E+02	0.00E+00	1.01E+02			3
142	10.870	37.693	2	9.68E+01	0.00E+00	9.68E+01			2
157	11.070	37.707	2	3.87E+01	0.00E+00	3.87E+01			2
180	10.677	38.512	4	1.09E+02	0.00E+00	1.09E+02			3
263	11.107	37.193	2	5.59E+00	0.00E+00	5.59E+00			1
264	11.055	37.800	6	5.12E+01	0.00E+00	5.12E+01			2
265	11.023	37.399	3	5.16E+01	0.00E+00	5.16E+01			2
266	10.804	37.172	5	3.57E+01	0.00E+00	3.57E+01			2
267	10.904	37.540	4	9.14E+01	0.00E+00	9.14E+01			2
268	10.713	37.514	5	9.75E+01	0.00E+00	9.75E+01			2
269	10.804	37.388	2	7.04E+01	0.00E+00	7.04E+01			2
270	10.922	37.125	2	2.86E+01	0.00E+00	2.86E+01			2
273	10.911	37.396	4	7.35E+01	0.00E+00	7.35E+01			2
274	10.911	37.542	4	9.22E+01	0.00E+00	9.22E+01			2
275	11.070	37.587	4	3.72E+01	0.00E+00	3.72E+01			2
276	10.945	37.696	4	1.08E+02	0.00E+00	1.08E+02			3

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

277	10.726	37.727	1	1.19E+02	0.00E+00	1.19E+02			3
278	10.760	37.219	1	4.81E+01	0.00E+00	4.81E+01			2
279	10.984	37.216	1	3.61E+01	0.00E+00	3.61E+01			2
280	11.117	37.373	2	9.22E+00	0.00E+00	9.22E+00			1
281	10.432	37.409	2	1.81E+01	0.00E+00	1.81E+01			1
282	10.763	37.514	2	9.55E+01	0.00E+00	9.55E+01			2
284	10.744	37.636	4	1.13E+02	0.00E+00	1.13E+02			3
319	10.888	37.255	8	4.74E+01	0.00E+00	4.74E+01			2
320	10.938	37.620	4	1.03E+02	0.00E+00	1.03E+02			3
321	11.039	37.195	1	2.05E+01	0.00E+00	2.05E+01			1
322	10.479	37.545	4	4.30E+01	0.00E+00	4.30E+01			2
323	10.463	37.224	3	1.52E+01	0.00E+00	1.52E+01			1
324	10.531	37.427	3	5.24E+01	0.00E+00	5.24E+01			2
325	10.510	37.141	14	1.72E+01	0.00E+00	1.72E+01			1

Mustard (HD) MRLS
Heavy Attack
Height of Release: 15m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (11.20, 52.65)									
3	11.844	47.063	4	2.29E+01	0.00E+00	2.29E+01	2	1	1
4	11.522	47.053	4	1.66E+02	0.00E+00	1.66E+02	6	5	3
5	11.662	47.449	4	1.11E+02	0.00E+00	1.11E+02	5	4	3
6	11.753	47.449	4	6.03E+01	0.00E+00	6.03E+01	3	2	2
7	11.842	47.452	4	2.24E+01	0.00E+00	2.24E+01	2	1	1
8	11.915	47.462	4	6.95E+00	0.00E+00	6.95E+00	2	1	1
9	11.139	47.431	4	2.15E+02	0.00E+00	2.15E+02	6	5	3
10	11.045	47.442	4	2.07E+02	0.00E+00	2.07E+02	6	5	3
11	11.250	47.445	4	2.16E+02	0.00E+00	2.16E+02	6	5	3
12	11.341	47.435	4	2.07E+02	0.00E+00	2.07E+02	6	5	3
15	11.948	44.446	3	5.45E+00	0.00E+00	5.45E+00	2	1	1
16	11.847	44.587	2	2.29E+01	0.00E+00	2.29E+01	2	1	1
17	11.466	46.869	2	1.78E+02	0.00E+00	1.78E+02	6	5	3
18	11.521	46.841	2	1.63E+02	0.00E+00	1.63E+02	6	5	3
32	11.792	44.548	2	3.88E+01	0.00E+00	3.88E+01	2	1	2
33	11.948	44.446	1	5.45E+00	0.00E+00	5.45E+00	2	1	1
34	11.896	44.456	2	1.21E+01	0.00E+00	1.21E+01	2	1	1
35	11.755	44.396	2	5.10E+01	0.00E+00	5.10E+01	3	2	2
36	11.773	44.474	1	4.51E+01	0.00E+00	4.51E+01	2	1	2
37	11.849	44.493	2	2.21E+01	0.00E+00	2.21E+01	2	1	1
38	10.930	37.318	2	9.90E+00	0.00E+00	9.90E+00	2	1	1
39	11.857	44.366	2	2.02E+01	0.00E+00	2.02E+01	2	1	1
40	10.797	37.297	5	6.65E+00	0.00E+00	6.65E+00	2	1	1
41	11.940	44.365	2	6.42E+00	0.00E+00	6.42E+00	2	1	1
42	11.953	44.514	2	5.01E+00	0.00E+00	5.01E+00	2	1	1
43	10.744	37.401	1	6.26E+00	0.00E+00	6.26E+00	2	1	1
45	10.904	37.401	1	1.06E+01	0.00E+00	1.06E+01	2	1	1
46	10.857	37.427	1	9.87E+00	0.00E+00	9.87E+00	2	1	1
47	10.948	37.639	2	1.59E+01	0.00E+00	1.59E+01	2	1	1
50	11.790	47.141	2	4.32E+01	0.00E+00	4.32E+01	2	1	2
51	10.624	44.475	2	4.19E+01	0.00E+00	4.19E+01	2	1	2
52	10.631	44.733	2	4.52E+01	0.00E+00	4.52E+01	2	1	2
53	11.247	46.908	2	2.07E+02	0.00E+00	2.07E+02	6	5	3
54	10.749	44.438	2	8.71E+01	0.00E+00	8.71E+01	4	3	2
66	11.938	44.438	2	6.67E+00	0.00E+00	6.67E+00	2	1	1
71	10.792	37.756	1	1.23E+01	0.00E+00	1.23E+01	2	1	1
72	10.794	37.683	1	1.14E+01	0.00E+00	1.14E+01	2	1	1
73	10.841	37.206	1	6.65E+00	0.00E+00	6.65E+00	2	1	1
112	11.555	50.608	4	2.07E+02	0.00E+00	2.07E+02	6	5	3
113	11.396	50.608	4	2.01E+02	0.00E+00	2.01E+02	6	5	3
114	11.475	50.622	4	1.99E+02	0.00E+00	1.99E+02	6	5	3
115	11.688	50.601	4	1.11E+02	0.00E+00	1.11E+02	5	4	3
124	11.803	44.430	6	3.47E+01	0.00E+00	3.47E+01	2	1	2
125	11.841	44.433	4	2.42E+01	0.00E+00	2.42E+01	2	1	1

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

130	10.865	37.347	3	9.00E+00	0.00E+00	9.00E+00	2	1	1
131	10.823	37.519	2	1.02E+01	0.00E+00	1.02E+01	2	1	1
135	10.812	37.913	2	1.60E+01	0.00E+00	1.60E+01	2	1	1
136	11.504	46.883	3	1.69E+02	0.00E+00	1.69E+02	6	5	3
137	11.421	46.891	3	1.87E+02	0.00E+00	1.87E+02	6	5	3
140	10.945	37.527	2	1.36E+01	0.00E+00	1.36E+01	2	1	1
141	10.896	37.670	2	1.52E+01	0.00E+00	1.52E+01	2	1	1
142	10.870	37.693	2	1.48E+01	0.00E+00	1.48E+01	2	1	1
143	10.531	44.636	2	1.84E+01	0.00E+00	1.84E+01	2	1	1
144	11.197	46.981	8	2.09E+02	0.00E+00	2.09E+02	6	5	3
145	11.255	47.090	8	2.10E+02	0.00E+00	2.10E+02	6	5	3
146	11.275	46.996	8	2.06E+02	0.00E+00	2.06E+02	6	5	3
147	10.670	44.618	8	5.85E+01	0.00E+00	5.85E+01	3	2	2
149	10.678	44.506	3	6.06E+01	0.00E+00	6.06E+01	3	2	2
150	10.733	44.618	8	8.26E+01	0.00E+00	8.26E+01	4	3	2
157	11.070	37.707	2	1.88E+01	0.00E+00	1.88E+01	2	1	1
161	11.135	47.004	2	2.08E+02	0.00E+00	2.08E+02	6	5	3
166	10.631	44.556	8	4.46E+01	0.00E+00	4.46E+01	2	1	2
167	11.875	44.589	3	1.67E+01	0.00E+00	1.67E+01	2	1	1
180	10.677	38.512	4	1.37E+01	0.00E+00	1.37E+01	2	1	1
181	11.428	38.418	4	3.66E+01	0.00E+00	3.66E+01	2	1	2
190	10.571	44.446	8	2.71E+01	0.00E+00	2.71E+01	2	1	2
255	11.809	47.158	7	3.53E+01	0.00E+00	3.53E+01	2	1	2
263	11.107	37.193	2	9.13E+00	0.00E+00	9.13E+00	2	1	1
264	11.055	37.800	6	2.08E+01	0.00E+00	2.08E+01	2	1	1
265	11.023	37.399	3	1.21E+01	0.00E+00	1.21E+01	2	1	1
266	10.804	37.172	5	5.52E+00	0.00E+00	5.52E+00	2	1	1
267	10.904	37.540	4	1.30E+01	0.00E+00	1.30E+01	2	1	1
268	10.713	37.514	5	6.03E+00	0.00E+00	6.03E+00	2	1	1
269	10.804	37.388	2	7.78E+00	0.00E+00	7.78E+00	2	1	1
270	10.922	37.125	2	7.01E+00	0.00E+00	7.01E+00	2	1	1
271	10.540	44.432	3	1.99E+01	0.00E+00	1.99E+01	2	1	1
272	10.544	44.527	3	2.09E+01	0.00E+00	2.09E+01	2	1	1
273	10.911	37.396	4	1.07E+01	0.00E+00	1.07E+01	2	1	1
274	10.911	37.542	4	1.31E+01	0.00E+00	1.31E+01	2	1	1
275	11.070	37.587	4	1.61E+01	0.00E+00	1.61E+01	2	1	1
276	10.945	37.696	4	1.69E+01	0.00E+00	1.69E+01	2	1	1
277	10.726	37.727	1	8.61E+00	0.00E+00	8.61E+00	2	1	1
278	10.760	37.219	1	5.02E+00	0.00E+00	5.02E+00	2	1	1
279	10.984	37.216	1	9.03E+00	0.00E+00	9.03E+00	2	1	1
280	11.117	37.373	2	1.22E+01	0.00E+00	1.22E+01	2	1	1
282	10.763	37.514	2	8.04E+00	0.00E+00	8.04E+00	2	1	1
284	10.744	37.636	4	8.63E+00	0.00E+00	8.63E+00	2	1	1
291	11.500	47.434	2	1.78E+02	0.00E+00	1.78E+02	6	5	3
319	10.888	37.255	8	8.25E+00	0.00E+00	8.25E+00	2	1	1
320	10.938	37.620	4	1.53E+01	0.00E+00	1.53E+01	2	1	1
321	11.039	37.195	1	8.89E+00	0.00E+00	8.89E+00	2	1	1
322	10.479	37.545	4	7.55E-03	0.00E+00	7.55E-03	1	1	1
324	10.531	37.427	3	2.40E-01	0.00E+00	2.40E-01	1	1	1
325	10.510	37.141	14	2.69E-02	0.00E+00	2.69E-02	1	1	1
355	11.345	50.611	5	2.22E+02	0.00E+00	2.22E+02	6	5	3
357	11.624	50.617	5	1.59E+02	0.00E+00	1.59E+02	6	5	3
358	11.743	50.608	5	5.88E+01	0.00E+00	5.88E+01	3	2	2

Case 2a: Protected (Eye,
Respiratory Exposure)

720 rounds at aimpoint (10.55, 39.60)

135	10.812	37.913	2	2.61E-01	0.00E+00	2.61E-01	1	1	
180	10.677	38.512	4	2.23E-01	1.75E+00	2.23E-01	1	1	
182	10.160	38.142	4	9.05E-01	0.00E+00	9.05E-01	1	1	

Case 2b: Protected (Skin
Exposure)

720 rounds at aimpoint (10.55, 39.60)

38	10.930	37.318	2	3.13E+01	0.00E+00	3.13E+01			2
40	10.797	37.297	5	2.76E+01	0.00E+00	2.76E+01			2
43	10.744	37.401	1	2.85E+01	0.00E+00	2.85E+01			2
44	10.463	37.339	2	3.11E+01	0.00E+00	3.11E+01			2
45	10.904	37.401	1	4.08E+01	0.00E+00	4.08E+01			2
46	10.857	37.427	1	3.99E+01	0.00E+00	3.99E+01			2
47	10.948	37.639	2	4.91E+01	0.00E+00	4.91E+01			2
71	10.792	37.756	1	5.02E+01	0.00E+00	5.02E+01			2
72	10.794	37.683	1	4.57E+01	0.00E+00	4.57E+01			2
73	10.841	37.206	1	2.33E+01	0.00E+00	2.33E+01			1

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

130	10.865	37.347	3	3.48E+01	0.00E+00	3.48E+01			2
131	10.823	37.519	2	4.12E+01	0.00E+00	4.12E+01			2
135	10.812	37.913	2	5.89E+01	0.00E+00	5.89E+01			2
140	10.945	37.527	2	4.31E+01	0.00E+00	4.31E+01			2
141	10.896	37.670	2	5.82E+01	0.00E+00	5.82E+01			2
142	10.870	37.693	2	5.82E+01	0.00E+00	5.82E+01			2
157	11.070	37.707	2	3.27E+01	0.00E+00	3.27E+01			2
180	10.677	38.512	4	6.68E+01	1.84E+02	3.30E+02			4
182	10.160	38.142	4	5.22E+01	0.00E+00	5.22E+01			2
263	11.107	37.193	2	5.21E+00	0.00E+00	5.21E+00			1
264	11.055	37.800	6	4.25E+01	0.00E+00	4.25E+01			2
265	11.023	37.399	3	2.74E+01	0.00E+00	2.74E+01			2
266	10.804	37.172	5	2.25E+01	0.00E+00	2.25E+01			1
267	10.904	37.540	4	5.06E+01	0.00E+00	5.06E+01			2
268	10.713	37.514	5	3.17E+01	0.00E+00	3.17E+01			2
269	10.804	37.388	2	3.23E+01	0.00E+00	3.23E+01			2
270	10.922	37.125	2	2.17E+01	0.00E+00	2.17E+01			1
273	10.911	37.396	4	3.94E+01	0.00E+00	3.94E+01			2
274	10.911	37.542	4	4.96E+01	0.00E+00	4.96E+01			2
275	11.070	37.587	4	2.95E+01	0.00E+00	2.95E+01			2
276	10.945	37.696	4	5.23E+01	0.00E+00	5.23E+01			2
277	10.726	37.727	1	4.64E+01	0.00E+00	4.64E+01			2
278	10.760	37.219	1	2.30E+01	0.00E+00	2.30E+01			1
279	10.984	37.216	1	1.91E+01	0.00E+00	1.91E+01			1
280	11.117	37.373	2	7.32E+00	0.00E+00	7.32E+00			1
281	10.432	37.409	2	3.41E+01	0.00E+00	3.41E+01			2
282	10.763	37.514	2	3.28E+01	0.00E+00	3.28E+01			2
284	10.744	37.636	4	3.59E+01	0.00E+00	3.59E+01			2
319	10.888	37.255	8	2.94E+01	0.00E+00	2.94E+01			2
320	10.938	37.620	4	4.99E+01	0.00E+00	4.99E+01			2
321	11.039	37.195	1	1.43E+01	0.00E+00	1.43E+01			1
322	10.479	37.545	4	5.23E+01	0.00E+00	5.23E+01			2
323	10.463	37.224	3	2.15E+01	0.00E+00	2.15E+01			1
324	10.531	37.427	3	4.47E+01	0.00E+00	4.47E+01			2
325	10.510	37.141	14	1.82E+01	0.00E+00	1.82E+01			1

Mustard (HD) 250kg Bomb
Light Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (8.35, 47.40)									
23	8.542	46.954	2	6.43E+00	6.06E+01	9.30E+01	2	1	2
24	8.524	46.961	2	2.34E+01	1.58E+02	2.49E+02	2	1	3
26	8.467	46.959	2	1.31E+01	1.08E+02	1.67E+02	2	1	3
28	8.488	46.960	2	7.21E+01	2.30E+02	4.01E+02	4	3	4
129	8.527	47.021	8	4.16E+01	2.11E+02	3.43E+02	2	1	4
221	8.456	47.003	4	9.37E+00	5.98E+01	9.48E+01	2	1	2
222	8.469	47.067	4	5.12E+01	2.17E+02	3.61E+02	3	2	4
223	8.521	47.070	4	2.33E+02	4.29E+02	8.46E+02	6	5	6
224	8.494	47.075	4	8.91E+02	1.02E+03	2.35E+03	6	6	7
256	8.601	46.901	2	0.00E+00	1.06E-01	1.51E-01	1	1	1
257	8.424	46.917	2	4.72E-04	2.00E+00	2.86E+00	1	1	1
258	8.403	46.914	2	5.91E-05	3.06E-01	4.37E-01	1	1	1
259	8.572	46.898	3	1.79E-01	5.16E+00	7.55E+00	1	1	1
293	8.543	47.116	5	2.14E+01	8.97E+01	1.50E+02	2	1	3
294	8.467	47.115	5	5.20E+01	2.16E+02	3.61E+02	3	2	4
295	8.492	47.117	5	9.89E+02	1.61E+03	3.29E+03	6	6	7
296	8.516	47.115	5	5.57E+02	9.81E+02	1.96E+03	6	6	7
2 rounds at aimpoint (8.35, 47.40)									
23	8.542	46.954	2	5.84E-02	2.02E+01	5.84E-02	1	1	
24	8.524	46.961	2	2.31E-01	5.27E+01	2.31E-01	1	1	
26	8.467	46.959	2	1.34E-01	3.62E+01	1.34E-01	1	1	
28	8.488	46.960	2	5.67E-01	7.67E+01	5.67E-01	1	1	
129	8.527	47.021	8	3.30E-01	7.03E+01	3.30E-01	1	1	

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Case 2a: Protected (Eye, Respiratory Exposure)

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

221	8.456	47.003	4	7.04E-02	1.99E+01	7.04E-02	1	1	
222	8.469	47.067	4	3.70E-01	7.22E+01	3.70E-01	1	1	
223	8.521	47.070	4	1.90E+00	1.43E+02	1.90E+00	1	1	
224	8.494	47.075	4	7.72E+00	3.40E+02	7.72E+00	2	1	
256	8.601	46.901	2	0.00E+00	3.53E-02	0.00E+00	1	1	
257	8.424	46.917	2	0.00E+00	6.67E-01	0.00E+00	1	1	
258	8.403	46.914	2	0.00E+00	1.02E-01	0.00E+00	1	1	
259	8.572	46.898	3	6.52E-06	1.72E+00	6.52E-06	1	1	
293	8.543	47.116	5	1.21E-01	2.99E+01	1.21E-01	1	1	
294	8.467	47.115	5	2.95E-01	7.19E+01	2.95E-01	1	1	
295	8.492	47.117	5	1.10E+01	5.37E+02	1.10E+01	2	1	
296	8.516	47.115	5	5.94E+00	3.27E+02	5.94E+00	2	1	

Case 2b: Protected (Skin Exposure)

2 rounds at aimpoint (8.35, 47.40)									
23	8.542	46.954	2	1.25E+00	5.77E+01	8.37E+01			2
24	8.524	46.961	2	4.52E+00	1.51E+02	2.20E+02			3
26	8.467	46.959	2	2.51E+00	1.03E+02	1.50E+02			3
28	8.488	46.960	2	1.43E+01	2.19E+02	3.27E+02			4
129	8.527	47.021	8	8.14E+00	2.01E+02	2.95E+02			4
221	8.456	47.003	4	1.78E+00	5.70E+01	8.32E+01			2
222	8.469	47.067	4	7.78E+00	2.07E+02	3.03E+02			4
223	8.521	47.070	4	3.65E+01	4.09E+02	6.21E+02			5
224	8.494	47.075	4	1.41E+02	9.72E+02	1.53E+03			7
256	8.601	46.901	2	0.00E+00	1.01E-01	1.44E-01			1
257	8.424	46.917	2	1.10E-04	1.91E+00	2.73E+00			1
258	8.403	46.914	2	1.48E-05	2.92E-01	4.17E-01			1
259	8.572	46.898	3	5.87E-02	4.92E+00	7.09E+00			1
293	8.543	47.116	5	2.43E+00	8.55E+01	1.25E+02			3
294	8.467	47.115	5	5.93E+00	2.06E+02	3.00E+02			4
295	8.492	47.117	5	1.62E+02	1.54E+03	2.36E+03			7
296	8.516	47.115	5	8.92E+01	9.35E+02	1.42E+03			6

Mustard (HD) 250kg Bomb
Moderate Attack
Height of Release: 70m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)			Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
	Xwind	Upwind					E	R	S
12 rounds at aimpoint (10.70, 37.75)									
38	10.930	37.318	2	2.52E+02	4.72E+02	9.26E+02	6	6	6
40	10.797	37.297	5	5.52E+01	2.15E+02	3.62E+02	3	2	4
43	10.744	37.401	1	1.31E+03	2.38E+03	4.71E+03	6	7	8
44	10.463	37.339	2	1.21E+01	8.18E+01	1.29E+02	2	1	3
45	10.904	37.401	1	6.62E+02	6.65E+02	1.61E+03	6	6	7
46	10.857	37.427	1	1.12E+03	3.28E+03	5.81E+03	6	6	8
47	10.948	37.639	2	3.19E+02	2.78E+01	3.59E+02	6	6	4
72	10.794	37.683	1	1.45E+03	1.11E+04	1.73E+04	6	7	9
73	10.841	37.206	1	4.92E+01	2.13E+02	3.53E+02	2	1	4
130	10.865	37.347	3	5.72E+02	7.91E+02	1.70E+03	6	6	7
131	10.823	37.519	2	2.01E+02	7.34E+02	1.25E+03	6	5	6
140	10.945	37.527	2	1.64E+03	1.40E+04	2.16E+04	6	7	9
141	10.896	37.670	2	1.92E+03	1.61E+04	2.49E+04	6	7	9
142	10.870	37.693	2	1.34E+01	5.87E+01	9.73E+01	2	1	2
157	11.070	37.707	2	9.84E-01	0.00E+00	9.84E-01	1	1	1
263	11.107	37.193	2	9.61E-01	1.40E+01	2.10E+01	1	1	1
265	11.023	37.399	3	1.66E+02	5.06E+02	8.89E+02	6	5	6
266	10.804	37.172	5	1.09E+01	9.61E+01	1.48E+02	2	1	3
267	10.904	37.540	4	1.18E+03	4.58E+03	7.72E+03	6	6	8
268	10.713	37.514	5	8.15E+02	1.98E+03	3.64E+03	6	6	7
269	10.804	37.388	2	5.56E+02	5.67E+02	1.37E+03	6	6	6
270	10.922	37.125	2	9.95E+00	8.12E+01	1.26E+02	2	1	3
273	10.911	37.396	4	4.51E+02	5.83E+02	1.28E+03	6	6	6
274	10.911	37.542	4	7.97E+02	3.29E+03	5.50E+03	6	6	8
275	11.070	37.587	4	3.50E+02	2.55E+03	3.99E+03	6	6	7
276	10.945	37.696	4	1.19E+01	1.20E+01	2.90E+01	2	1	2
277	10.726	37.727	1	4.00E+00	1.03E-01	4.15E+00	1	1	1
278	10.760	37.219	1	7.43E+01	2.39E+02	4.16E+02	4	3	4

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

279	10.984	37.216	1	2.10E+01	1.55E+02	2.42E+02	2	1	3
280	11.117	37.373	2	5.77E-03	3.79E-01	5.47E-01	1	1	1
281	10.432	37.409	2	1.71E-01	1.85E+00	2.81E+00	1	1	1
282	10.763	37.514	2	9.04E+02	7.45E+03	1.15E+04	6	6	8
284	10.744	37.636	4	3.04E+02	5.91E+01	3.88E+02	6	6	4
319	10.888	37.255	8	2.99E+01	1.90E+02	3.01E+02	2	1	4
320	10.938	37.620	4	3.77E+02	6.81E+02	1.35E+03	6	6	6
321	11.039	37.195	1	2.99E+01	1.76E+02	2.81E+02	2	1	4
322	10.479	37.545	4	2.48E+02	1.12E+03	1.85E+03	6	5	7
323	10.463	37.224	3	4.11E+00	3.80E+01	5.84E+01	1	1	2
324	10.531	37.427	3	4.47E+02	1.43E+03	2.49E+03	6	6	7
325	10.510	37.141	14	9.31E+00	6.89E+01	1.08E+02	2	1	3

**Case 2a: Protected (Eye,
Respiratory Exposure)**

12 rounds at aimpoint (10.65, 37.75)									
38	10.930	37.318	2	7.73E-01	1.13E+02	7.73E-01	1	1	
40	10.797	37.297	5	3.50E+00	2.18E+02	3.50E+00	1	1	
43	10.744	37.401	1	3.54E+00	2.13E+02	3.54E+00	1	1	
44	10.463	37.339	2	1.03E+00	1.19E+02	1.03E+00	1	1	
45	10.904	37.401	1	1.86E+01	8.51E+02	1.86E+01	2	1	
46	10.857	37.427	1	6.32E+00	2.86E+02	6.32E+00	2	1	
47	10.948	37.639	2	1.36E+01	5.85E+03	1.36E+01	2	1	
72	10.794	37.683	1	5.75E-03	9.42E+00	5.75E-03	1	1	
73	10.841	37.206	1	6.51E-01	4.28E+01	6.51E-01	1	1	
130	10.865	37.347	3	1.01E+00	1.29E+02	1.01E+00	1	1	
131	10.823	37.519	2	1.94E+00	5.69E+02	1.94E+00	1	1	
140	10.945	37.527	2	2.02E+01	1.20E+03	2.02E+01	2	1	
141	10.896	37.670	2	7.57E-03	8.53E+00	7.57E-03	1	1	
142	10.870	37.693	2	4.62E-01	6.33E+02	4.62E-01	1	1	
265	11.023	37.399	3	2.16E+00	1.61E+02	2.16E+00	1	1	
266	10.804	37.172	5	7.67E-01	5.37E+01	7.67E-01	1	1	
267	10.904	37.540	4	1.23E+01	5.40E+03	1.23E+01	2	1	
268	10.713	37.514	5	9.63E+00	2.48E+03	9.63E+00	2	1	
269	10.804	37.388	2	1.70E+01	7.16E+02	1.70E+01	2	1	
270	10.922	37.125	2	6.28E-01	2.87E+01	6.28E-01	1	1	
273	10.911	37.396	4	1.23E+01	5.86E+02	1.23E+01	2	1	
274	10.911	37.542	4	8.09E+00	3.70E+03	8.09E+00	2	1	
275	11.070	37.587	4	1.14E-06	0.00E+00	1.14E-06	1	1	
276	10.945	37.696	4	1.33E+00	2.03E+03	1.33E+00	1	1	
277	10.726	37.727	1	6.97E-06	4.05E-01	6.97E-06	1	1	
278	10.760	37.219	1	6.51E-01	4.71E+01	6.51E-01	1	1	
279	10.984	37.216	1	7.18E-01	6.77E+01	7.18E-01	1	1	
281	10.432	37.409	2	1.82E+00	1.28E+02	1.82E+00	1	1	
282	10.763	37.514	2	1.18E+01	6.63E+02	1.18E+01	2	1	
284	10.744	37.636	4	1.18E+01	4.72E+03	1.18E+01	2	1	
319	10.888	37.255	8	1.21E+00	1.10E+02	1.21E+00	1	1	
320	10.938	37.620	4	9.67E+00	2.84E+03	9.67E+00	2	1	
321	11.039	37.195	1	9.55E-02	1.89E+01	9.55E-02	1	1	
322	10.479	37.545	4	2.51E+00	1.18E+03	2.51E+00	1	1	
323	10.463	37.224	3	5.86E-01	4.76E+01	5.86E-01	1	1	
324	10.531	37.427	3	2.72E+00	2.09E+02	2.72E+00	1	1	
325	10.510	37.141	14	6.67E-01	3.70E+01	6.67E-01	1	1	

**Case 2b: Protected (Skin
Exposure)**

12 rounds at aimpoint (10.65, 37.75)									
38	10.930	37.318	2	1.44E+01	3.24E+02	4.77E+02			4
40	10.797	37.297	5	1.04E+02	6.23E+02	9.94E+02			6
43	10.744	37.401	1	9.77E+01	6.10E+02	9.69E+02			6
44	10.463	37.339	2	2.25E+01	3.42E+02	5.11E+02			5
45	10.904	37.401	1	2.21E+02	2.43E+03	3.69E+03			7
46	10.857	37.427	1	1.23E+02	8.17E+02	1.29E+03			6
47	10.948	37.639	2	1.57E+02	1.67E+04	2.40E+04			9
72	10.794	37.683	1	7.91E-02	2.69E+01	3.85E+01			2
73	10.841	37.206	1	5.82E+00	1.22E+02	1.80E+02			3
130	10.865	37.347	3	2.40E+01	3.69E+02	5.51E+02			5
131	10.823	37.519	2	2.31E+01	1.63E+03	2.35E+03			7
140	10.945	37.527	2	2.13E+02	3.42E+03	5.10E+03			8
141	10.896	37.670	2	1.00E-01	2.44E+01	3.50E+01			2
142	10.870	37.693	2	6.44E+00	1.81E+03	2.59E+03			7
265	11.023	37.399	3	2.76E+01	4.60E+02	6.85E+02			5
266	10.804	37.172	5	7.52E+00	1.54E+02	2.28E+02			3
267	10.904	37.540	4	1.42E+02	1.54E+04	2.21E+04			9

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

268	10.713	37.514	5	1.07E+02	7.10E+03	1.02E+04			8
269	10.804	37.388	2	2.13E+02	2.05E+03	3.14E+03			7
270	10.922	37.125	2	4.78E+00	8.21E+01	1.22E+02			3
273	10.911	37.396	4	1.51E+02	1.68E+03	2.55E+03			7
274	10.911	37.542	4	9.36E+01	1.06E+04	1.52E+04			9
275	11.070	37.587	4	1.57E-05	0.00E+00	1.57E-05			1
276	10.945	37.696	4	1.91E+01	5.80E+03	8.30E+03			8
277	10.726	37.727	1	6.99E-04	1.16E+00	1.66E+00			1
278	10.760	37.219	1	5.94E+00	1.35E+02	1.99E+02			3
279	10.984	37.216	1	1.01E+01	1.94E+02	2.87E+02			4
281	10.432	37.409	2	4.61E+01	3.66E+02	5.69E+02			5
282	10.763	37.514	2	1.31E+02	1.90E+03	2.85E+03			7
284	10.744	37.636	4	1.35E+02	1.35E+04	1.94E+04			9
319	10.888	37.255	8	3.07E+01	3.13E+02	4.78E+02			4
320	10.938	37.620	4	1.09E+02	8.13E+03	1.17E+04			8
321	11.039	37.195	1	1.85E+00	5.41E+01	7.91E+01			2
322	10.479	37.545	4	2.90E+01	3.38E+03	4.86E+03			8
323	10.463	37.224	3	6.42E+00	1.36E+02	2.01E+02			3
324	10.531	37.427	3	5.25E+01	5.97E+02	9.05E+02			6
325	10.510	37.141	14	5.80E+00	1.06E+02	1.57E+02			3

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (10.55, 38.15)									
38	10.930	37.318	2	1.03E+01	5.68E+01	9.14E+01	2	1	2
40	10.797	37.297	5	1.90E+01	8.48E+01	1.40E+02	2	1	3
43	10.744	37.401	1	5.21E+01	1.39E+02	2.51E+02	3	2	4
44	10.463	37.339	2	1.95E+01	9.90E+01	1.61E+02	2	1	3
45	10.904	37.401	1	3.39E+02	2.17E+02	6.49E+02	6	6	5
46	10.857	37.427	1	8.85E+01	1.71E+02	3.33E+02	4	3	4
47	10.948	37.639	2	1.99E+01	4.61E+01	8.58E+01	2	1	2
71	10.792	37.756	1	2.85E+03	1.42E+04	2.31E+04	6	7	9
72	10.794	37.683	1	1.93E+03	8.53E+03	1.41E+04	6	7	9
73	10.841	37.206	1	7.39E+00	2.99E+01	5.01E+01	2	1	2
130	10.865	37.347	3	2.19E+01	1.03E+02	1.69E+02	2	1	3
131	10.823	37.519	2	3.39E+02	4.99E+02	1.05E+03	6	6	6
135	10.812	37.913	2	1.23E+03	7.87E+03	1.25E+04	6	7	9
140	10.945	37.527	2	2.53E+01	8.10E+01	1.41E+02	2	1	3
141	10.896	37.670	2	1.95E+03	7.85E+03	1.32E+04	6	7	9
142	10.870	37.693	2	6.46E+02	1.21E+03	2.37E+03	6	6	7
265	11.023	37.399	3	1.28E-05	5.91E-02	8.44E-02	1	1	1
266	10.804	37.172	5	7.04E+00	2.47E+01	4.23E+01	2	1	2
267	10.904	37.540	4	1.27E+03	1.19E+03	2.97E+03	6	7	7
268	10.713	37.514	5	7.06E+02	7.05E+02	1.71E+03	6	6	7
269	10.804	37.388	2	2.66E+02	2.16E+02	5.75E+02	6	6	5
270	10.922	37.125	2	2.96E+00	1.03E+01	1.77E+01	1	1	1
273	10.911	37.396	4	2.35E+02	1.79E+02	4.91E+02	6	5	4
274	10.911	37.542	4	8.96E+02	9.22E+02	2.21E+03	6	6	7
276	10.945	37.696	4	2.82E+01	9.09E+01	1.58E+02	2	1	3
277	10.726	37.727	1	3.48E+02	1.02E+03	1.81E+03	6	6	7
278	10.760	37.219	1	8.64E+00	3.47E+01	5.82E+01	2	1	2
279	10.984	37.216	1	3.14E-01	3.12E+00	4.77E+00	1	1	1
281	10.432	37.409	2	9.76E+01	1.81E+02	3.56E+02	4	3	4
282	10.763	37.514	2	3.73E+02	3.73E+02	9.06E+02	6	6	6
284	10.744	37.636	4	1.16E+03	1.16E+03	2.82E+03	6	6	7
319	10.888	37.255	8	1.23E+01	4.70E+01	7.94E+01	2	1	2
320	10.938	37.620	4	8.23E+01	1.96E+02	3.62E+02	4	3	4
321	11.039	37.195	1	0.00E+00	1.08E-01	1.54E-01	1	1	1
322	10.479	37.545	4	4.83E+02	6.83E+02	1.46E+03	6	6	6
323	10.463	37.224	3	8.28E+00	3.68E+01	6.09E+01	2	1	2
324	10.531	37.427	3	1.35E+02	2.14E+02	4.41E+02	5	4	4
325	10.510	37.141	14	5.30E+00	1.82E+01	3.13E+01	2	1	2

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

**Case 2a: Protected (Eye,
Respiratory Exposure)**

24 rounds at aimpoint (10.70, 37.95)								
38	10.930	37.318	2	3.41E+00	1.90E+02	3.41E+00	1	1
40	10.797	37.297	5	2.08E+00	9.06E+01	2.08E+00	1	1
43	10.744	37.401	1	1.80E+01	8.50E+02	1.80E+01	2	1
44	10.463	37.339	2	5.90E-01	3.56E+01	5.90E-01	1	1
45	10.904	37.401	1	5.52E+00	2.58E+02	5.52E+00	2	1
46	10.857	37.427	1	1.85E+01	1.24E+03	1.85E+01	2	1
47	10.948	37.639	2	2.42E+01	2.02E+03	2.42E+01	2	1
71	10.792	37.756	1	1.81E+01	1.61E+03	1.81E+01	2	1
72	10.794	37.683	1	1.88E+01	3.34E+03	1.88E+01	2	1
73	10.841	37.206	1	2.38E+00	8.08E+01	2.38E+00	1	1
130	10.865	37.347	3	6.69E+00	3.01E+02	6.69E+00	2	1
131	10.823	37.519	2	3.39E+00	3.80E+02	3.39E+00	1	1
135	10.812	37.913	2	3.35E-01	7.14E+02	3.35E-01	1	1
140	10.945	37.527	2	2.02E+01	4.87E+03	2.02E+01	2	1
141	10.896	37.670	2	2.11E+01	4.67E+03	2.11E+01	2	1
142	10.870	37.693	2	5.02E+00	9.27E+02	5.02E+00	2	1
157	11.070	37.707	2	4.18E+00	9.70E+02	4.18E+00	1	1
263	11.107	37.193	2	8.20E-02	7.00E+00	8.20E-02	1	1
264	11.055	37.800	6	6.88E-01	1.47E+03	6.88E-01	1	1
265	11.023	37.399	3	2.04E+00	2.19E+02	2.04E+00	1	1
266	10.804	37.172	5	2.07E+00	3.75E+01	2.07E+00	1	1
267	10.904	37.540	4	2.32E+01	1.64E+03	2.32E+01	2	1
268	10.713	37.514	5	1.31E+01	7.78E+02	1.31E+01	2	1
269	10.804	37.388	2	4.59E+00	2.27E+02	4.59E+00	1	1
270	10.922	37.125	2	2.02E+00	3.18E+01	2.02E+00	1	1
273	10.911	37.396	4	4.10E+00	2.36E+02	4.10E+00	1	1
274	10.911	37.542	4	1.60E+01	1.22E+03	1.60E+01	2	1
275	11.070	37.587	4	5.20E+00	8.92E+02	5.20E+00	2	1
276	10.945	37.696	4	1.78E+01	3.26E+03	1.78E+01	2	1
277	10.726	37.727	1	1.12E+00	3.76E+02	1.12E+00	1	1
278	10.760	37.219	1	2.49E+00	9.27E+01	2.49E+00	1	1
279	10.984	37.216	1	2.08E+00	6.13E+01	2.08E+00	1	1
280	11.117	37.373	2	6.22E-05	2.74E+00	6.22E-05	1	1
281	10.432	37.409	2	5.56E-05	3.49E+00	5.56E-05	1	1
282	10.763	37.514	2	1.25E+01	2.66E+03	1.25E+01	2	1
284	10.744	37.636	4	2.01E+01	1.78E+03	2.01E+01	2	1
319	10.888	37.255	8	2.16E+00	7.79E+01	2.16E+00	1	1
320	10.938	37.620	4	1.34E+01	1.41E+03	1.34E+01	2	1
321	11.039	37.195	1	2.18E+00	6.60E+01	2.18E+00	1	1
322	10.479	37.545	4	5.06E+00	4.42E+02	5.06E+00	2	1
323	10.463	37.224	3	6.13E-01	1.59E+01	6.13E-01	1	1
324	10.531	37.427	3	7.46E+00	5.79E+02	7.46E+00	2	1
325	10.510	37.141	14	1.88E+00	2.62E+01	1.88E+00	1	1

**Case 2b: Protected (Skin
Exposure)**

24 rounds at aimpoint (10.70, 37.95)								
38	10.930	37.318	2	6.14E+01	5.42E+02	8.36E+02		6
40	10.797	37.297	5	2.84E+01	2.59E+02	3.98E+02		4
43	10.744	37.401	1	2.35E+02	2.43E+03	3.71E+03		7
44	10.463	37.339	2	6.93E+00	1.02E+02	1.53E+02		3
45	10.904	37.401	1	1.33E+02	7.36E+02	1.18E+03		6
46	10.857	37.427	1	2.44E+02	3.54E+03	5.30E+03		8
47	10.948	37.639	2	2.75E+02	5.79E+03	8.55E+03		8
71	10.792	37.756	1	2.04E+02	4.62E+03	6.80E+03		8
72	10.794	37.683	1	2.30E+02	9.56E+03	1.39E+04		9
73	10.841	37.206	1	2.84E+01	2.31E+02	3.58E+02		4
130	10.865	37.347	3	1.10E+02	8.62E+02	1.34E+03		6
131	10.823	37.519	2	5.24E+01	1.09E+03	1.61E+03		7
135	10.812	37.913	2	5.79E+00	2.04E+03	2.92E+03		7
140	10.945	37.527	2	2.84E+02	1.39E+04	2.01E+04		9
141	10.896	37.670	2	2.65E+02	1.34E+04	1.94E+04		9
142	10.870	37.693	2	6.08E+01	2.65E+03	3.85E+03		7
157	11.070	37.707	2	4.93E+01	2.77E+03	4.01E+03		8
263	11.107	37.193	2	5.88E-01	2.00E+01	2.92E+01		2
264	11.055	37.800	6	1.20E+01	4.20E+03	6.01E+03		8
265	11.023	37.399	3	4.20E+01	6.26E+02	9.36E+02		6
266	10.804	37.172	5	9.99E+00	1.07E+02	1.63E+02		3
267	10.904	37.540	4	2.90E+02	4.69E+03	6.99E+03		8
268	10.713	37.514	5	1.66E+02	2.23E+03	3.35E+03		7

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

269	10.804	37.388	2	1.16E+02	6.51E+02	1.05E+03			6
270	10.922	37.125	2	9.32E+00	9.09E+01	1.39E+02			3
273	10.911	37.396	4	9.51E+01	6.75E+02	1.06E+03			6
274	10.911	37.542	4	2.04E+02	3.48E+03	5.18E+03			8
275	11.070	37.587	4	6.53E+01	2.55E+03	3.71E+03			7
276	10.945	37.696	4	2.08E+02	9.31E+03	1.35E+04			9
277	10.726	37.727	1	1.47E+01	1.08E+03	1.56E+03			7
278	10.760	37.219	1	3.59E+01	2.65E+02	4.14E+02			4
279	10.984	37.216	1	1.44E+01	1.75E+02	2.64E+02			4
280	11.117	37.373	2	9.40E-02	7.82E+00	1.13E+01			1
281	10.432	37.409	2	1.15E-01	9.99E+00	1.44E+01			1
282	10.763	37.514	2	1.85E+02	7.60E+03	1.10E+04			8
284	10.744	37.636	4	2.31E+02	5.09E+03	7.50E+03			8
319	10.888	37.255	8	1.94E+01	2.23E+02	3.38E+02			4
320	10.938	37.620	4	1.60E+02	4.02E+03	5.90E+03			8
321	11.039	37.195	1	2.12E+01	1.89E+02	2.91E+02			4
322	10.479	37.545	4	6.63E+01	1.26E+03	1.87E+03			7
323	10.463	37.224	3	3.27E+00	4.55E+01	6.83E+01			2
324	10.531	37.427	3	1.02E+02	1.66E+03	2.47E+03			7
325	10.510	37.141	14	7.79E+00	7.50E+01	1.15E+02			3

Mustard (HD) 250kg TBM
Light Attack
Height of Release: 500m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (10.85, 44.65)									
38	10.930	37.318	2	1.15E+01	2.90E+01	5.29E+01	2	1	2
40	10.797	37.297	5	1.23E+01	2.76E+01	5.17E+01	2	1	2
43	10.744	37.401	1	1.57E+01	4.51E+01	8.01E+01	2	1	2
45	10.904	37.401	1	3.72E+01	1.05E+02	1.87E+02	2	1	3
46	10.857	37.427	1	6.42E+01	1.88E+02	3.33E+02	3	2	4
47	10.948	37.639	2	1.87E+01	5.16E+01	9.24E+01	2	1	2
71	10.792	37.756	1	6.40E+01	1.07E+02	2.17E+02	3	2	3
72	10.794	37.683	1	1.77E+02	3.14E+02	6.26E+02	6	5	5
73	10.841	37.206	1	4.65E+00	6.53E+00	1.40E+01	1	1	1
130	10.865	37.347	3	2.67E+01	7.10E+01	1.28E+02	2	1	3
131	10.823	37.519	2	1.49E+02	4.07E+02	7.30E+02	5	4	5
135	10.812	37.913	2	1.18E+01	9.09E+00	2.48E+01	2	1	1
140	10.945	37.527	2	3.60E+01	1.06E+02	1.87E+02	2	1	3
141	10.896	37.670	2	2.85E+02	5.48E+02	1.07E+03	6	6	6
142	10.870	37.693	2	7.00E+02	1.40E+03	2.70E+03	6	6	7
265	11.023	37.399	3	2.67E+00	8.37E+00	1.46E+01	1	1	1
266	10.804	37.172	5	2.36E+00	2.77E+00	6.32E+00	1	1	1
267	10.904	37.540	4	1.16E+02	3.21E+02	5.75E+02	5	4	5
268	10.713	37.514	5	8.36E+00	2.63E+01	4.59E+01	2	1	2
269	10.804	37.388	2	3.51E+01	9.86E+01	1.76E+02	2	1	3
270	10.922	37.125	2	9.63E-01	7.71E-01	2.06E+00	1	1	1
273	10.911	37.396	4	3.27E+01	9.24E+01	1.65E+02	2	1	3
274	10.911	37.542	4	1.01E+02	2.80E+02	5.01E+02	5	4	5
275	11.070	37.587	4	0.00E+00	7.54E-02	1.08E-01	1	1	1
276	10.945	37.696	4	8.52E+00	2.51E+01	4.44E+01	2	1	2
277	10.726	37.727	1	3.56E-02	5.91E-01	8.80E-01	1	1	1
278	10.760	37.219	1	3.46E+00	4.90E+00	1.05E+01	1	1	1
279	10.984	37.216	1	2.00E+00	2.52E+00	5.60E+00	1	1	1
280	11.117	37.373	2	0.00E+00	1.62E-01	2.31E-01	1	1	1
282	10.763	37.514	2	4.24E+01	1.27E+02	2.24E+02	2	1	3
284	10.744	37.636	4	1.14E+01	3.47E+01	6.10E+01	2	1	2
319	10.888	37.255	8	7.67E+00	1.54E+01	2.97E+01	2	1	2
320	10.938	37.620	4	4.81E+01	1.13E+02	2.10E+02	2	1	3
321	11.039	37.195	1	3.37E-01	5.51E-01	1.12E+00	1	1	1

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

153	13.540	48.367	4	0.00E+00	1.95E+01	2.73E+01			2
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Mustard (HD) 500kg TBM
Moderate Attack
Height of Release: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S

2 rounds at aimpoint (10.60, 38.55)

38	10.930	37.318	2	4.09E+01	1.04E+02	1.89E+02	2	1	3
40	10.797	37.297	5	1.60E+01	3.70E+01	6.89E+01	2	1	2
43	10.744	37.401	1	1.10E+01	2.94E+01	5.30E+01	2	1	2
44	10.463	37.339	2	5.51E-01	2.95E-01	9.72E-01	1	1	1
45	10.904	37.401	1	7.68E+01	1.98E+02	3.60E+02	4	3	4
46	10.857	37.427	1	7.38E+01	1.77E+02	3.27E+02	4	3	4
47	10.948	37.639	2	3.65E+02	7.92E+02	1.50E+03	6	6	6
71	10.792	37.756	1	2.03E+01	4.43E+01	8.36E+01	2	1	2
72	10.794	37.683	1	3.57E+01	8.13E+01	1.52E+02	2	1	3
73	10.841	37.206	1	1.17E+01	2.31E+01	4.47E+01	2	1	2
130	10.865	37.347	3	4.17E+01	1.07E+02	1.95E+02	2	1	3
131	10.823	37.519	2	7.15E+01	1.83E+02	3.33E+02	4	3	4
135	10.812	37.913	2	1.29E+01	2.11E+01	4.30E+01	2	1	2
140	10.945	37.527	2	1.84E+02	4.48E+02	8.24E+02	6	5	6
141	10.896	37.670	2	3.85E+02	8.28E+02	1.57E+03	6	6	7
142	10.870	37.693	2	2.87E+02	6.19E+02	1.17E+03	6	6	6
157	11.070	37.707	2	2.85E+01	6.78E+01	1.25E+02	2	1	3
182	10.160	38.142	4	1.09E+01	3.22E+01	5.69E+01	2	1	2
263	11.107	37.193	2	3.93E+00	7.27E+00	1.43E+01	1	1	1
264	11.055	37.800	6	1.58E+01	3.69E+01	6.85E+01	2	1	2
265	11.023	37.399	3	4.56E+01	1.19E+02	2.16E+02	2	1	3
266	10.804	37.172	5	6.75E+00	1.12E+01	2.28E+01	2	1	1
267	10.904	37.540	4	1.82E+02	4.68E+02	8.51E+02	6	5	6
268	10.713	37.514	5	5.35E+00	1.62E+01	2.85E+01	2	1	2
269	10.804	37.388	2	2.85E+01	7.65E+01	1.38E+02	2	1	3
270	10.922	37.125	2	7.10E+00	1.09E+01	2.27E+01	2	1	1
273	10.911	37.396	4	7.45E+01	1.92E+02	3.49E+02	4	3	4
274	10.911	37.542	4	1.85E+02	4.74E+02	8.62E+02	6	5	6
275	11.070	37.587	4	3.86E+01	9.79E+01	1.78E+02	2	1	3
276	10.945	37.696	4	4.84E+02	1.02E+03	1.94E+03	6	6	7
277	10.726	37.727	1	1.19E+00	4.39E+00	7.46E+00	1	1	1
278	10.760	37.219	1	5.96E+00	1.12E+01	2.20E+01	2	1	1
279	10.984	37.216	1	1.58E+01	3.17E+01	6.11E+01	2	1	2
280	11.117	37.373	2	9.53E+00	2.56E+01	4.61E+01	2	1	2
281	10.432	37.409	2	1.54E+00	1.50E+00	3.68E+00	1	1	1
282	10.763	37.514	2	1.99E+01	5.64E+01	1.00E+02	2	1	3
284	10.744	37.636	4	6.30E+00	1.96E+01	3.43E+01	2	1	2
319	10.888	37.255	8	2.27E+01	5.16E+01	9.64E+01	2	1	2
320	10.938	37.620	4	3.25E+02	7.18E+02	1.35E+03	6	6	6
321	11.039	37.195	1	8.54E+00	1.66E+01	3.23E+01	2	1	2
322	10.479	37.545	4	3.80E+00	6.36E+00	1.29E+01	1	1	1
324	10.531	37.427	3	3.64E-01	5.93E-01	1.21E+00	1	1	1

2 rounds at aimpoint (8.05, 50.85)

0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
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2 rounds at aimpoint (8.05, 50.85)

80	7.801	50.708	4	5.36E-05	3.33E+01	4.66E+01			2
89	7.766	50.608	3	3.55E-02	3.89E+02	5.45E+02			5
347	7.753	50.700	5	9.70E-01	1.51E+03	2.11E+03			7

Mustard (HD) 500kg TBM
Heavy Attack
Height of Release: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S

Table D5
HD Exposure Estimates
Heavy Brigade, Forward Maneuver Battalion, Defense

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

4 rounds at aimpoint (10.55, 38.80)

38	10.930	37.318	2	8.12E+00	1.03E+01	2.28E+01	2	1	1
40	10.797	37.297	5	2.43E+01	5.28E+01	9.97E+01	2	1	2
43	10.744	37.401	1	8.55E+01	1.91E+02	3.58E+02	4	3	4
44	10.463	37.339	2	1.00E+01	2.60E+01	4.71E+01	2	1	2
45	10.904	37.401	1	1.90E+01	3.17E+01	6.43E+01	2	1	2
46	10.857	37.427	1	3.46E+01	6.48E+01	1.27E+02	2	1	3
47	10.948	37.639	2	7.63E+01	1.91E+02	3.49E+02	4	3	4
71	10.792	37.756	1	3.12E+02	6.80E+02	1.28E+03	6	6	6
72	10.794	37.683	1	1.97E+02	4.89E+02	8.96E+02	6	5	6
73	10.841	37.206	1	8.72E+00	1.36E+01	2.81E+01	2	1	2
130	10.865	37.347	3	1.82E+01	3.09E+01	6.23E+01	2	1	2
131	10.823	37.519	2	8.12E+01	1.74E+02	3.30E+02	4	3	4
135	10.812	37.913	2	6.98E+02	1.39E+03	2.68E+03	6	6	7
140	10.945	37.527	2	3.83E+01	8.46E+01	1.59E+02	2	1	3
141	10.896	37.670	2	1.44E+02	3.58E+02	6.55E+02	5	4	5
142	10.870	37.693	2	1.86E+02	4.60E+02	8.43E+02	6	5	6
157	11.070	37.707	2	1.19E+01	3.34E+01	5.96E+01	2	1	2
182	10.160	38.142	4	8.09E+01	2.06E+02	3.75E+02	4	3	4
264	11.055	37.800	6	1.41E+01	4.00E+01	7.12E+01	2	1	2
265	11.023	37.399	3	6.28E+00	8.73E+00	1.88E+01	2	1	1
266	10.804	37.172	5	9.70E+00	1.59E+01	3.24E+01	2	1	2
267	10.904	37.540	4	5.88E+01	1.30E+02	2.45E+02	3	2	3
268	10.713	37.514	5	2.01E+02	4.75E+02	8.80E+02	6	5	6
269	10.804	37.388	2	4.18E+01	8.92E+01	1.69E+02	2	1	3
270	10.922	37.125	2	1.77E+00	1.49E+00	3.90E+00	1	1	1
273	10.911	37.396	4	1.76E+01	2.85E+01	5.83E+01	2	1	2
274	10.911	37.542	4	5.68E+01	1.26E+02	2.37E+02	3	2	3
275	11.070	37.587	4	9.17E+00	2.37E+01	4.30E+01	2	1	2
276	10.945	37.696	4	1.09E+02	2.70E+02	4.95E+02	5	4	4
277	10.726	37.727	1	3.95E+02	8.46E+02	1.60E+03	6	6	7
278	10.760	37.219	1	2.06E+01	4.17E+01	8.02E+01	2	1	2
279	10.984	37.216	1	1.64E+00	1.31E+00	3.51E+00	1	1	1
280	11.117	37.373	2	1.07E+00	1.40E+00	3.07E+00	1	1	1
281	10.432	37.409	2	5.27E+00	1.46E+01	2.61E+01	2	1	2
282	10.763	37.514	2	1.32E+02	2.91E+02	5.48E+02	5	4	5
284	10.744	37.636	4	2.37E+02	5.49E+02	1.02E+03	6	5	6
319	10.888	37.255	8	7.78E+00	1.02E+01	2.24E+01	2	1	1
320	10.938	37.620	4	7.63E+01	1.87E+02	3.43E+02	4	3	4
321	11.039	37.195	1	2.13E-01	2.66E-01	5.93E-01	1	1	1
322	10.479	37.545	4	1.66E+01	4.04E+01	7.43E+01	2	1	2
323	10.463	37.224	3	6.31E+00	1.34E+01	2.55E+01	2	1	2
324	10.531	37.427	3	4.78E+01	1.23E+02	2.24E+02	2	1	3
325	10.510	37.141	14	6.67E+00	1.16E+01	2.32E+01	2	1	1

**Case 2a: Protected (Eye,
Respiratory Exposure)**

4 rounds at aimpoint (11.35, 37.95)

0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
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**Case 2b: Protected (Skin
Exposure)**

4 rounds at aimpoint (11.35, 37.95)

157	11.070	37.707	2	2.74E-02	3.39E+02	4.75E+02			4
264	11.055	37.800	6	9.37E-01	1.44E+03	2.02E+03			7

APPENDIX E

HEAVY BRIGADE, BRIGADE SUPPORT AREA, OFFENSE AND DEFENSE

Appendix E: Heavy Brigade, Brigade Support Area, Offense and Defense

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Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location	
Mech Inf Bn1	HHC		S1 Sec	Rear CP	2 HMMWV	12	3	FSA	
						14	4	FSA	
			Fast Sec	Rear CP	1 HMMWV	35	2	FSA	
			S-4 Sec	Rear CP	1 M577	71	5	FSA	
			Co HQ	Rear CP	1 HMMWV	13	2	FSA	
					1 Truck	145	3	FSA	
			Commo Sec	Rear CP	1 M577	70	3	FSA	
			Maint Sec	Main CP	1 M578	188	3	FSA	
					4 M88A1	78	3	FSA	
						79	3	FSA	
						80	3	FSA	
						81	3	FSA	
					Rear CP	3 Truck	147	4	FSA
							142	3	FSA
							146	5	FSA
	HHC	Bn Sprt Plt	S-1 Sec		1 Truck	110	4	Fld train	
			Co HQ	Fld trains CP	1 HMMWV	5	2	Fld train	
					2 Truck	109	2	Fld train	
						118	1	Fld train	
			HQ Sec		1 HMMWV	7	5	Fld train	
			Trns Sec	Class III & V Team	4 Trucks (4 in 1 icon)	115	4	Fld train	
					5 HEMMT C (5 in 1 icon)	217	5	Fld train	
					4 HEMMT P (4 in 1 icon)	224	4	Fld train	
					4 HEMMT C (4 in 1 icon)	216	4	Fld train	
			Mess Sec		1 Truck	116	2	Fld train	
					4 Trucks (4 in 1 icon)	114	12	Fld train	
HHC			Bn Maint Plt	Admin Sec		1 HMMWV	4	1	Fld train
	3 Truck	117				1	Fld train		
		113				1	Fld train		
		111				1	Fld train		

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Mech Inf Bn2	HHC	Bn Maint Plt	Sprt Sec	Fld trains CP	2 5 ton wrecker	205	1	Fld train
					206	1	Fld train	
			S-1 Sec		1 Truck	128	4	Fld train
			Co HQ		1 HMMWV	10	2	Fld train
			2 Truck		125	2	Fld train	
			124		1	Fld train		
			HQ Sec		1 HMMWV	8	5	Fld train
			4 Trucks (4 in 1 icon)		119	4	Fld train	
			5 HEMMT C (5 in 1 icon)		219	5	Fld train	
			Trns Sec		4 HEMMT P (4 in 1 icon)	225	4	Fld train
			Class III & V Team		4 HEMMT C (4 in 1 icon)	218	8	Fld train
			Mess Sec		1 Truck	122	2	Fld train
			4 Trucks (4 in 1 icon)		120	12	Fld train	
			Mech Inf Bn2		HHC	Bn Sprt Plt	Admin Sec	1 HMMWV
3 Truck	127	1		Fld train				
126	1	Fld train						
123	1	Fld train						
Sprt Sec	2 5 ton wrecker	207		1			Fld train	
208	1	Fld train						
S-1 Sec	Main CP	1 Truck		107			6	Fld train
Co HQ	Fld trains CP	1 HMMWV		2			2	Fld train
1 Truck	100	3		Fld train				
HQ Sec	1 HMMWV	3		5			Fld train	
Trns Sec	3 Truck	103		2			Fld train	
105	1	Fld train						
106	1	Fld train						
1 HEMMT C	215	2		Fld train				
1 Truck	101	1	Fld train					
2 HEMMT P	222	2	Fld train					

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						223	2	Fld train
				10 HEMMT P (10 in 1 icon)		221	10	Fld train
				3 Trucks (3 in 1 icon)		108	12	Fld train
	HHC	Bn Maint Plt	Rec/Sprt Sec		1 Truck	102	2	Fld train
					1 5 Ton Wrecker	204	1	Fld train
				1 Recovery Vehicle HEMMT		226	1	Fld train
			Maint/SVC Sec		1 Truck	104	6	Fld train
		Chaparral ADA Plt (from Corps)	Plt HQ		1 M113	82	3	FSA
					1 Truck	139	2	FSA
				4 Chaparral		89	4	FSA
Tank Bn	HHC	Chaparral ADA Plt (from Corps)	Plt HQ			90	4	FSA
						91	4	FSA
						92	4	FSA
	Air Def Arty Batt		Battery HQ		1 M577	72	2	FSA
					5 Trucks (5 in 1 icon)	134	10	FSA
				2 HMMWV(2 in 1 icon)		17	4	FSA
	Air Def Arty Batt	MSCS Plt	Plt HQ		1 HMMWV	15	2	FSA
			Motor Maint Sec		4 Trucks (4 in 1 icon)	130	16	FSA
			Sys Maint Sec		3 HMMWV(3 in 1 icon)	18	9	FSA
			Sys Maint Sec		1 2-1/2 ton van-shop	227	1	FSA
	Air Def Arty Batt	Gun Plt			3 Vulcan	86	4	FSA
						87	4	FSA
						88	4	FSA
Fwd Sprt Bn	HQ & HQ Detachment		Commnd Sec		2 HMMWV	65	4	FSA
						64	5	FSA
			PAC Sec		2 HMMWV	66	2	FSA
						67	3	FSA
			Plans-Ops Br		1 HMMWV	68	4	FSA

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
			Commo Br		2 HMMWV	69	1	FSA
						36	1	FSA
			Sprt Op Sec		1 HMMWV	37	3	FSA
					1 5 ton van-expansible	235	2	FSA
			S-4 Sec		1 HMMWV	38	3	FSA
			Detachment HQ		6 Truck	181	3	FSA
						182	2	FSA
						183	2	FSA
						184	2	FSA
						179	2	FSA
						180	2	FSA
					1 HMMWV	39	1	FSA
	Supply Co		Co HQ		2 HMMWV	40	5	FSA
						41	5	FSA
					2 Truck	157	4	FSA
						158	4	FSA
					1 5 ton wrecker	211	1	FSA
Fwd Sprt Bn	Supply Co		Supply Plt HQ		1 HMMWV	42	3	FSA
			Supply Sec		2 Semi-trailer flatbed	196	2	FSA
						195	2	FSA
					1 Semi-trailer van	200	2	FSA
					1 HMMWV	43	4	FSA
					1 Truck	159	3	FSA
			Class V (ATP) Sec		1 HMMWV	241	7	FSA
					1 5 ton tractor	242	7	FSA
			Petroleum Sec		10 Semi-trailer POL (10 in 1 icon)	198	10	FSA
					1 HMMWV	46	2	FSA
					3 Truck	148	1	FSA
						149	1	FSA
						150	1	FSA
	Ordance Co		Co HQ		4 Truck (4 in 1 icon)	154	16	FSA
					2 HMMWV	51	6	FSA
						48	6	FSA

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
Fwd Sprt Bn	Ordance Co	Aumtv/Armt Plt	Maint Control Sec		2 Semi-trailer van	201	2	FSA
						199	2	FSA
					2 HMMWV	50	3	FSA
						54	3	FSA
					1 5 ton van exp	233	3	FSA
			Class IX Sprt Sec	6 Semi-trailer flatbed (6 in 1 icon)		197	6	FSA
					6 Semi-trailer van (6 in 1 icon)	202	6	FSA
				12 Truck (12 in 1 icon)		161	12	FSA
			Plt HQ		1 HMMWV	52	2	FSA
			Autmv Maint Rep Sec		2 2-1/2 ton van	236	7	FSA
						234	8	FSA
			Armt Maint Rep Sec		2 Truck	160	2	FSA
						162	2	FSA
					1 HMMWV	53	2	FSA
					3 2-1/2 ton vans (3 in 1 icon)	232	6	FSA
					1 M113	84	3	FSA
					3 Truck	163	3	FSA
						165	3	FSA
						164	3	FSA
					1 HMMWV	58	3	FSA
					1 2-1/2 ton van	237	2	FSA
					2 M113	83	2	FSA
	Ordance Co	Aumtv/Armt Plt	Armt Maint Rep Sec			85	2	FSA
					3 Truck	167	2	FSA
						168	2	FSA
						169	2	FSA
					1 2-1/2 ton van	228	2	FSA
					1 5 ton wrecker	214	1	FSA
					2 HMMWV	55	2	FSA
						57	2	FSA
			Plt HQ		1 HMMWV	56	2	FSA
					1 Truck	170	9	FSA
					1 5 ton wrecker	212	2	FSA
	Ordance Co	Grd Sprt Equip Plt	Service/Recovery Sec		1 Truck	213	2	FSA
			Grd Sprt Equip Rep Sec		2 Truck	166	4	FSA

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
						171	4	FSA
					6 Truck	172	1	FSA
						173	1	FSA
						174	1	FSA
						175	1	FSA
						176	1	FSA
						177	1	FSA
					1 HMMWV	62	4	FSA
			MSL Maint Rep Sec		4 HMMWV	61	3	FSA
						60	3	FSA
						59	3	FSA
						63	2	FSA
					1 Truck	178	1	FSA
	Med Co		Co HQ		2 Truck	151	4	FSA
						152	4	FSA
					2 HMMWV	47	4	FSA
						45	4	FSA
					1 5 ton wrecker	210	2	FSA
	Med Co	Trmt Plt	Plt HQ		1 HMMWV	44	2	FSA
					1 Truck	153	2	FSA
					4 M577	73	4	FSA
						74	4	FSA
						75	4	FSA
						76	4	FSA
					3 5 ton van expansible	229	4	FSA
						230	4	FSA
						231	4	FSA
					2 Truck	155	2	FSA
						156	2	FSA
	Med Co	Amb Plt	Plt HQ		1 HMMWV	49	2	FSA
Fwd Sprt Bn	Med Co	Amb Plt	Plt HQ		4 HMMWV-AMB (4 in 1 icon)	239	8	FSA
					6 M113 Ambulance (6 in 1 icon)	240	12	FSA
Eng Bn	HHQ		Co HQ		2 Trucks (2 in 1 icon)	136	4	FSA
			Admin/Log Sec		2 HMMWV	21	7	FSA
						22	8	FSA

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location
			Food Serv Sec		2 Trucks (2 in 1 icon)	135	12	FSA
		Sprt Plt	Sprt Plt HQ		1 HMMWV	16	4	FSA
			Bn Maint Sec		1 M88A1	77	2	FSA
					1 HMMWV	19	4	FSA
					4 Trucks (4 in 1 icon)	129	40	FSA
					1 5 ton wrecker	209	1	FSA
			Trns Sec		1 Truck	131	2	FSA
					5 Trucks (5 in 1 icon)	132	5	FSA
	Eng Co 1		Co HQ		1 Truck	99	3	FSA
					1 HMMWV	1	2	FSA
	Eng Co 1	Asl & Obs Plt	Obstacle Sec		2 6 ton M548 (2 in 1 icon)	189	4	1 TFA
					4 Semi-trailer flatbet (4 in 1 icon)	192	4	FSA
					2 Volcano (2 in 1 icon)	185	4	1 TFA
	Eng Co 2		Co HQ		1 Truck	112	3	FSA
					1 HMMWV	6	2	FSA
	Eng Co 2		Obstacle Sec		2 6 ton M548 (2 in 1 icon)	190	4	2 TFA
					4 Semi-trailer flatbet (4 in 1 icon)	193	4	FSA
					2 Volcano (2 in 1 icon)	186	4	2 TFA
	Eng Co 3		Co HQ		1 Truck	121	3	FSA
					1 HMMWV	11	2	FSA
	Eng Co 3		Obstacle Sec		2 6 ton M548 (2 in 1 icon)	191	4	3 TFA
					4 Semi-trailer flatbet (4 in 1 icon)	194	4	FSA
	Eng Co 2				7 ACE (7 in 1 icon)	93	7	FSA
	Eng Co 3				2 Volcano (2 in 1 icon)	187	4	3 TFA
Fld Arty Bn	HHB		Battery HQ		1 Truck	138	2	FSA
	HHB	Commo Plt	Plt HQ		1 HMMWV	30	5	FSA
	HHB		Wire Sec		3 HMMWV	26	5	FSA
						27	4	FSA
						28	4	FSA

Table E1
Unit Description by Tactical Layout
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Battalion	Company	Platoon	Section	Element/Team/Squad	Vehicle	Icon #	Crew	Location			
Fld Arty Bn	HHB	Commo Plt	Radio Sec		2 HMMWV	29	3	FSA			
						32	4	FSA			
					1 Truck	137	2+4	FSA			
					1 HMMWV-AMB	238	2	FSA			
					1 Truck	144	4	FSA			
					2 HMMWV	31	4	FSA			
						25	1	FSA			
					3 HEMMT C (3 in 1 icon)	220	3	FSA			
				Svc Batt	Battery HQ		1 HMMWV	20	7	FSA	
							Bn Supply Sec	9 Trucks (9 in 1 icon)	133	9	FSA
							Maint Plt HQ	1 HMMWV	23	6	FSA
								1 Truck	94	1	FSA
						Bn Maint Sec		3 Trucks (3 in 1 icon)	140	24	FSA
								5 ton wrecker	203	1	FSA
		1 Truck	141				10	FSA			
		3 Trucks (3 in 1 icon)	95				33	FSA			
		SVC Battery Maint Sec				1 Truck	96	7	FSA		
		Ammo Plt HQ				1 HMMWV	24	4	FSA		
		3 Ammo Secs	14 Trucks (14 in 1 icon)			97	28	FSA			
	Food Service Sec		1 Truck			98	5	FSA			
			4 Trucks (4 in 1 icon)			143	16	FSA			
	MP Plt	HQ		1 HMMWV	34	3	FSB				
				6 HMMWV(6 in 1 icon)	33	18	FSB				
				1 M110A1	243	0					

Note:

FLD TRN: In brigade FSA

CBT TRN: In battalion rear area

MAINT: In battalion rear area

There is an additional unit in the Janus scenario; #243, an M110A1. This unit was selected for reasons of convenience to deliver the nuclear warhead, it has zero crew.

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
1	16.058	16.697	2	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN	ENG CO 1		Co HQ			
2	16.495	18.182	2	FLD TRN	HMMWV	HB BSA OFF & DEF	TANK BN	HHC		Co HQ	FLD TRNS CP Element		
3	16.398	18.288	5	FLD TRN	HMMWV	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt	HQ Sec			
4	14.111	17.886	1	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Admin Sec			
5	14.117	18.329	2	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 1	HHC		Co HQ	FLD Trns CP Element		
6	16.013	17.002	2	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2		Co HQ			
7	14.261	17.923	5	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	HQ Sec			
8	15.018	18.957	5	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 2	HHC	BN Spt Plt	HQ Sec			
9	14.935	19.036	1	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Admin Sec			
10	15.059	19.065	2	FLD TRN	HMMWV	HB BSA OFF & DEF	MECH INF BN 2	HHC		Co HQ	FLD Trns CP Element		
11	16.118	16.767	2	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN	ENG CO 3		Co HQ			
12	14.297	15.740	3	FSA	HMMWV	HB BSA OFF & DEF		HHC		S1 Sec	Rear CP Element		
13	14.424	15.732	2	FSA	HMMWV	HB BSA OFF & DEF		HHC		Co HQ	Rear CP Element		
14	14.328	15.664	4	FSA	HMMWV	HB BSA OFF & DEF		HHC		S1 Sec	Rear CP Element		
15	15.135	17.274	2	FSA	HMMWV	HB BSA OFF & DEF		AIR DEF ARTY BATT	MSCS PLT	Plt HQ			
16	16.187	16.658	4	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Spt Plt HQ			
17	15.252	17.386	4	FSA	2 HMMWV (2 in 1 icon)	HB BSA OFF & DEF		AIR DEF ARTY BATT		BATT HQ			
18	15.173	17.315	9	FSA	3 HMMWV (3 in 1 icon)	HB BSA OFF & DEF		AIR DEF ARTY BATT	MSCS PLT	Sys Maint Sec			
19	16.065	16.500	4	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Bn Maint Sec			
20	15.732	18.428	7	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		BATT HQ			
21	16.357	16.781	7	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN	HHQ		Admin/Log Sec			
22	16.263	17.082	8	FSA	HMMWV	HB BSA OFF & DEF	ENGINEER BN	HHQ		Admin/Log Sec			
23	15.640	18.125	6	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Maint Plt HQ			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
24	15.675	18.447	4	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Ammo Plt HQ			
25	15.684	18.075	1	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB					Unit Ministry Team
26	15.384	17.995	5	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Wire Sec			
27	15.405	18.172	4	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Wire Sec			
28	15.433	18.082	4	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Wire Sec			
29	15.452	18.232	3	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Radio Sec			
30	15.476	18.303	5	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Plt HQ			
31	15.526	18.028	4	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB					Pers/Admin Cen
32	15.369	18.094	4	FSA	HMMWV	HB BSA OFF & DEF	FLD ARTY BN	HHB	Commo Plt	Radio Sec			
33	14.295	15.942	18	FSB	6 HMMWV (6 in 1 icon)	HB BSA OFF & DEF			MP PLT			2 MP Sqds	
34	14.352	15.910	3	FSB	HMMWV	HB BSA OFF & DEF			MP PLT	HQ			
35	14.200	15.526	2	FSA	HMMWV	HB BSA OFF & DEF		HHC		Fast Section	Rear CP		
36	14.014	15.723	1	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Commo Br			
37	13.967	15.661	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Spt Op Sec			
38	14.158	15.717	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		S-4 Sec			
39	14.167	15.640	1	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT					Unit Ministry Team
40	13.167	15.236	5	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Co HQ			
41	13.523	15.457	5	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Co HQ			
42	13.250	15.380	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Plt HQ			
43	13.293	15.301	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Sec			
44	14.944	14.076	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt	Plt HQ			
45	14.877	14.351	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO		Co HQ			
46	13.637	14.470	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Petroleum Section			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
47	14.765	14.203	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO		Co HQ			
48	15.950	15.453	6	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Co HQ			
49	14.871	14.057	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Amb. Plt	Plt HQ			
50	15.975	14.694	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Maint Control Sec			
51	15.970	15.328	6	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Co HQ			
52	15.803	14.834	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Plt HQ			
53	15.716	14.523	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Armt Maint Rep Sec			
54	15.841	14.686	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Maint Control Sec			
55	15.746	15.374	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
56	16.489	14.995	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Plt HQ			
57	15.907	15.517	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
58	15.921	14.547	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
59	16.339	14.858	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	MSL Maint Rep Sec			
60	16.396	14.734	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	MSL Maint Rep Sec			
61	16.479	14.715	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	MSL Maint Rep Sec			
62	16.143	14.987	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
63	16.376	15.063	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	MSL Maint Rep Sec			
64	14.090	15.527	5	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Commnd Sec			
65	14.026	15.514	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Commnd Sec			
66	14.088	15.619	2	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		PAC Sec			
67	14.034	15.648	3	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		PAC Sec			
68	13.990	15.588	4	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Plans-Ops Br			
69	13.972	15.518	1	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Commo Br			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
70	14.251	15.628	3	FSA	M577	HB BSA OFF & DEF		HHC		Commo Sec	Rear CP Element		
71	14.520	15.772	5	FSA	M577	HB BSA OFF & DEF		HHC		S-4 Sec	Rear CP Element		
72	15.153	17.386	2	FSA	M577	HB BSA OFF & DEF		AIR DEF ARTY BATT		BATT HQ			
73	14.648	14.038	4	FSA	M577	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Squad	
74	14.675	14.244	4	FSA	M577	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Squad	
75	14.913	14.211	4	FSA	M577	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Squad	
76	14.721	13.951	4	FSA	M577	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Squad	
77	16.101	16.650	2	FSA	Recovery Vehicle-Medium/M88A1	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Bn Maint Sec			
78	14.250	15.469	3	FSA	Recovery Vehicle-Medium/M88A1	HB BSA OFF & DEF		HHC		Maint Sec	Main CP Element		
79	14.331	15.561	3	FSA	Recovery Vehicle-Medium/M88A2	HB BSA OFF & DEF		HHC		Maint Sec	Main CP Element		
80	14.387	15.549	3	FSA	Recovery Vehicle-Medium/M88A3	HB BSA OFF & DEF		HHC		Maint Sec	Main CP Element		
81	14.397	15.423	3	FSA	Recovery Vehicle-Medium/M88A4	HB BSA OFF & DEF		HHC		Maint Sec	Main CP Element		
82	15.413	19.029	3	FSA	M113	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)	Plt HQ			
83	15.850	15.349	2	FSA	M113	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
84	15.751	14.664	3	FSA	M113	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
85	15.813	15.577	2	FSA	M113	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
86	13.893	16.032	4	FSA	Vulcan	HB BSA OFF & DEF		AIR DEF ARTY BATT	Gun Plt			Gun Sqd	
87	14.568	16.110	4	FSA	Vulcan	HB BSA OFF & DEF		AIR DEF ARTY BATT	Gun Plt			Gun Sqd	
88	14.250	16.235	4	FSA	Vulcan	HB BSA OFF & DEF		AIR DEF ARTY BATT	Gun Plt			Gun Sqd	
89	16.009	18.852	4	FSA	Chaparral	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)			Chaparral Sqds	
90	15.914	18.998	4	FSA	Chaparral	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)			Chaparral Sqds	
91	15.692	19.420	4	FSA	Chaparral	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)			Chaparral Sqds	
92	15.441	19.341	4	FSA	Chaparral	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)			Chaparral Sqds	

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
93	16.187	16.809	7	FSA	7 ACE (7 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2	Asl & Obs Plt	Obstacle Sec			
94	15.517	18.257	1	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Maint Plt HQ			
95	15.626	18.194	33	FSA	3 Trucks (3 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT					3 FB Maint Tms
96	15.529	18.169	7	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		SVC BATT Maint Sec			
97	15.607	18.398	28	FSA	14 Trucks (14 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		3 Ammo Secs			
98	15.562	18.363	5	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Food Service Sec			
99	16.079	16.804	3	FSA	Truck	HB BSA OFF & DEF	ENGINEER BN	ENG CO 1		Co HQ			
100	16.436	18.381	3	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC		Co HQ	FLD TRNS CP Element		
101	16.286	18.545	1	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				POL Team
102	16.523	18.281	2	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC	BN Maint Plt	Rec/Spt Sec			
103	16.329	18.484	2	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt	Trans Sec			
104	16.470	18.045	6	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC		Maint/SVC Sec			
105	16.350	18.091	1	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt	Trans Sec			
106	16.332	18.240	1	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt	Trans Sec			
107	16.493	18.354	6	FLD TRN	Truck	HB BSA OFF & DEF	TANK BN	HHC		S-1 Sec	Main CP Element		
108	16.408	18.056	12	FLD TRN	3 Trucks (3 in 1 icon)	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				Co Mess Team
109	14.033	17.922	2	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC		Co HQ	FLD Trns CP Element		
110	14.310	18.223	4	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC		S-1 Sec			
111	14.038	18.057	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Admin Sec			
112	16.100	17.033	3	FSA	Truck	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2		Co HQ			
113	14.205	18.374	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Admin Sec			
114	14.232	18.233	12	FLD TRN	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Mess Sec			
115	14.229	18.057	4	FLD TRN	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Trans Sec			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
116	14.089	18.241	2	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Mess Sec			
117	14.311	18.024	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Admin Sec			
118	14.022	18.183	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 1	HHC		Co HQ	FLD Trns CP Element		
119	15.063	18.848	4	FLD TRN	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 2	HHC	BN Spt Plt	Trans Sec			
120	15.074	19.229	12	FLD TRN	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 2	HHC		Mess Sec			
121	16.226	16.924	3	FSA	Truck	HB BSA OFF & DEF	ENGINEER BN	ENG CO 3		Co HQ			
122	15.000	19.241	2	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC		Mess Sec			
123	14.861	19.198	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Admin Sec			
124	15.107	19.036	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC		Co HQ	FLD Trns CP Element		
125	15.009	19.087	2	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC		Co HQ	FLD Trns CP Element		
126	14.890	19.069	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Admin Sec			
127	14.841	19.040	1	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Admin Sec			
128	15.124	19.175	4	FLD TRN	Truck	HB BSA OFF & DEF	MECH INF BN 2	HHC		S-1 Sec			
129	16.188	16.473	40	FSA	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Bn Maint Sec			
130	15.248	17.308	16	FSA	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF		AIR DEF ARTY BATT	MSCS PLT	Motor Maint Sec			
131	16.175	16.676	2	FSA	Truck	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Transp Sec			
132	16.015	16.530	5	FSA	5 Trucks (5 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Transp Sec			
133	15.733	18.328	9	FSA	9 Trucks (9 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Bn Supply Sec			
134	15.206	17.396	10	FSA	5 Trucks (5 in 1 icon)	HB BSA OFF & DEF		AIR DEF ARTY BATT		BATT HQ			
135	16.324	16.829	12	FSA	2 Trucks (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	HHQ		Food Serv Sec			
136	16.374	16.990	4	FSA	2 Trucks (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	HHQ		Co HQ			
137	15.561	17.979	2+4	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	HHB					Treatment Tm
138	15.585	18.218	2	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	HHB		BATT HQ			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
139	15.506	19.036	2	FSA	Truck	HB BSA OFF & DEF			CHAPARRAL ADA PLT (from Corps)	Plt HQ			
140	15.641	18.402	24	FSA	3 Trucks (3 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Bn Maintenance Sec			
141	15.601	18.327	10	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT					HQ BATT Maint. Tm
142	14.434	15.611	3	FSA	Truck	HB BSA OFF & DEF		HHC		Maint Sec	Rear CP Element		
143	15.719	18.229	16	FSA	4 Trucks (4 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Food Service Sec			
144	15.555	18.123	4	FSA	Truck	HB BSA OFF & DEF	FLD ARTY BN	HHB					Pers/Admin Cen
145	14.358	15.463	3	FSA	Truck	HB BSA OFF & DEF		HHC		Co HQ	Rear CP Element		
146	14.184	15.394	5	FSA	Truck	HB BSA OFF & DEF		HHC		Mess Sec			
147	14.297	15.464	4	FSA	Truck	HB BSA OFF & DEF		HHC		Maint Sec	Rear CP Element		
148	13.681	14.597	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Petroleum Section			
149	13.478	14.388	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Petroleum Section			
150	13.534	14.378	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Petroleum Section			
151	14.858	14.159	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO		Co HQ			
152	14.625	14.322	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO		Co HQ			
153	14.854	13.963	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt	Plt HQ			
154	15.921	15.357	16	FSA	4 Truck (4 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Co HQ			
155	14.604	13.876	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Patient Holding Sqd	
156	14.760	14.069	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Patient Holding Sqd	
157	13.193	15.343	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Co HQ			
158	13.389	15.206	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Co HQ			
159	13.456	15.290	3	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Sec			
160	15.588	14.773	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Armt Maint Rep Sec			
161	16.283	14.887	12	FSA	12 Truck (12 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Class IX Spt Sec			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
162	15.618	14.622	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Armt Maint Rep Sec			
163	15.853	14.526	3	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
164	15.667	14.794	3	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
165	15.824	14.794	3	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
166	16.178	15.100	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Grd Spt Equip Rep Sec			
167	15.684	15.464	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
168	15.780	15.281	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
169	15.735	15.486	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
170	16.241	14.979	9	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Service/Recovery Sec			
171	16.233	15.088	4	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Grd Spt Equip Rep Sec			
172	16.219	14.747	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
173	16.407	14.834	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
174	16.174	14.734	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
175	16.414	15.004	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
176	16.349	14.675	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
177	16.471	14.830	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Elect Equip Rep Sec			
178	16.157	14.868	1	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	MSL Maint Rep Sec			
179	13.870	15.600	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			
180	13.871	15.733	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			
181	13.935	15.551	3	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			
182	13.925	15.695	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			
183	13.934	15.437	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			
184	13.867	15.450	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Detachment HQ			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
185	16.181	17.037	4	1 TF	2 Volcano (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 1	Asl & Obs Plt	Obstacle Sec			
186	16.296	16.955	4	2 TF	2 Volcano (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2	Asl & Obs Plt	Obstacle Sec			
187	16.163	16.951	4	3 TF	2 Volcano (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 3	Asl & Obs Plt	Obstacle Sec			
188	14.436	15.492	3	FSA	Recovery Vehicle-Light/M578	HB BSA OFF & DEF		HHC		Maint Sec	Main CP Element		
189	16.264	16.500	4	1 TF	Carrier/M548 (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 1	Asl & Obs Plt	Obstacle Sec			
190	16.032	16.870	4	2 TF	Carrier/M548 (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2	Asl & Obs Plt	Obstacle Sec			
191	16.288	16.648	4	3 TF	Carrier/M548 (2 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 3	Asl & Obs Plt	Obstacle Sec			
192	16.005	16.725	4	FSA	4 Semi-trailer flatbet (4 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 1	Asl & Obs Plt	Obstacle Sec			
193	16.112	16.912	4	FSA	4 Semi-trailer flatbet (4 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 2	Asl & Obs Plt	Obstacle Sec			
194	16.252	16.789	4	FSA	4 Semi-trailer flatbet (4 in 1 icon)	HB BSA OFF & DEF	ENGINEER BN	ENG CO 3	Asl & Obs Plt	Obstacle Sec			
195	13.266	15.204	2	FSA	Semi-trailer flatbed	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Sec			
196	13.429	15.394	2	FSA	Semi-trailer flatbed	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Sec			
197	15.916	14.875	6	FSA	6 Semi-trailer flatbed (6 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Class IX Spt Sec			
198	13.455	14.706	10	FSA	10 Semi-trailer POL (10 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Petroleum Section			
199	15.987	14.868	2	FSA	Semi-trailer van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Maint Control Sec			
200	13.360	15.319	2	FSA	Semi-trailer van	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Supply Sec			
201	15.916	14.708	2	FSA	Semi-trailer van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Maint Control Sec			
202	16.294	14.763	6	FSA	6 Semi-trailer van (6 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Class IX Spt Sec			
203	15.677	18.330	1	FSA	5 ton wrecker	HB BSA OFF & DEF	FLD ARTY BN	SERVICE BATT		Bn Maintenance Sec			
204	16.461	18.591	1	FLD TRN	5 Ton Wrecker	HB BSA OFF & DEF	TANK BN	HHC	Bn Maint Plt	Rec/Spt Sec			
205	14.177	18.046	1	FLD TRN	5 ton wrecker	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Spt Sec			
206	14.049	18.351	1	FLD TRN	5 ton wrecker	HB BSA OFF & DEF	MECH INF BN 1	HHC	Bn Maint Plt	Spt Sec			
207	14.908	18.942	1	FLD TRN	5 ton wrecker	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Spt Sec			

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
208	14.822	18.948	1	FLD TRN	5 ton wrecker	HB BSA OFF & DEF	MECH INF BN 2	HHC	Bn Maint Plt	Spt Sec			
209	16.134	16.486	1	FSA	5 ton wrecker	HB BSA OFF & DEF	ENGINEER BN		SPT PLT	Bn Maint Sec			
210	14.879	14.240	2	FSA	5 ton wrecker	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO		Co HQ			
211	13.294	15.448	1	FSA	5 ton wrecker	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Co HQ			
212	16.315	15.061	2	FSA	5 ton wrecker	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Service/Recovery Sec			
213	16.228	14.881	2	FSA	Truck	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Grd Spt Equip Plt	Service/Recovery Sec			
214	15.841	15.478	1	FSA	5 ton wrecker	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
215	16.269	18.118	2	FLD TRN	Cargo HEMMT	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				Ammo Team
216	14.138	18.176	4	FLD TRN	4 Cargo HEMMT (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Class III & V Team			
217	14.112	18.070	5	FLD TRN	5 Cargo HEMMT (5 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Trans Sec			
218	14.983	18.822	8	FLD TRN	4 Cargo HEMMT (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 2	HHC		Class III & V Team			
219	14.925	18.819	5	FLD TRN	5 Cargo HEMMT (5 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 2	HHC	BN Spt Plt	Trans Sec			
220	15.484	18.048	3	FSA	3 Cargo HEMMT (3 in 1 icon)	HB BSA OFF & DEF	FLD ARTY BN	HHB					FLD Trns
221	16.393	18.433	10	FLD TRN	10 Fuel HEMMT (10 in 1 icon)	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				POL Team
222	16.447	18.213	2	FLD TRN	Fuel HEMMT	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				POL Team
223	16.300	18.359	2	FLD TRN	Fuel HEMMT	HB BSA OFF & DEF	TANK BN	HHC	BN Spt Plt				POL Team
224	14.212	17.935	4	FLD TRN	4 Fuel HEMMT (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 1	HHC	BN Spt Plt	Trans Sec			
225	15.036	18.722	4	FLD TRN	4 Fuel HEMMT (4 in 1 icon)	HB BSA OFF & DEF	MECH INF BN 2	HHC		Trans Sec			
226	16.382	18.616	1	FLD TRN	Recovery Veh HEMMT	HB BSA OFF & DEF	TANK BN	HHC		Rec/Spt Sec			
227	15.113	17.328	1	FSA	2-1/2 ton van-shop	HB BSA OFF & DEF		AIR DEF ARTY BATT	MSCS PLT	Sys Maint Sec			
228	15.701	15.607	2	FSA	2-1/2 ton van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Eng System Spt Team
229	14.521	13.926	4	FSA	5 ton van expandible	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Area Sppt Sqd	
230	14.523	14.092	4	FSA	5 ton van expandible	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Sqd, Area	

Table E2
Unit Description by Icon Number
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Location	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Squad	Team
231	14.583	14.082	4	FSA	5 ton van expensible	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Trmt Plt			Treatment Sqd, Area	
232	15.630	14.497	6	FSA	3 2-1/2 ton vans (3 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Armt Maint Rep Sec			
233	15.692	14.599	3	FSA	5 ton van exp	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO		Maint Control Sec			
234	15.772	14.883	8	FSA	2-1/2 ton van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Autmv Maint Rep Sec			
235	14.109	15.773	2	FSA	5 ton van-expensible	HB BSA OFF & DEF	FWD SPRT BN	HQ & HQ DETACHMENT		Spt Op Sec			
236	15.710	14.733	7	FSA	2-1/2 ton van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO	Aumtv/Armt Plt	Autmv Maint Rep Sec			
237	15.776	14.522	2	FSA	2-1/2 ton van	HB BSA OFF & DEF	FWD SPRT BN	ORDANCE CO					Arty Spt Team
238	15.612	17.946	2	FSA	HMMWV ambulance	HB BSA OFF & DEF	FLD ARTY BN	HHB					Treatment Tm
239	14.688	14.397	8	FSA	ambulance (4 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Amb. Plt			2 Amb Sqds, wheel	
240	14.775	14.328	12	FSA	6 M113 Ambulance (6 in 1 icon)	HB BSA OFF & DEF	FWD SPRT BN	MEDICAL CO	Amb. Plt			3 Ambl Sqds, track	
241	13.891	14.199	7	FSA	HMMWV	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Class V (ATP) Sec			
242	13.901	14.027	7	FSA	5 ton tractor	HB BSA OFF & DEF	FWD SPRT BN	SUPPLY CO		Class V (ATP) Sec			
243			0		M110A1	HB BSA OFF & DEF							

Figure E1
Unit Layout: Standard Scale
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

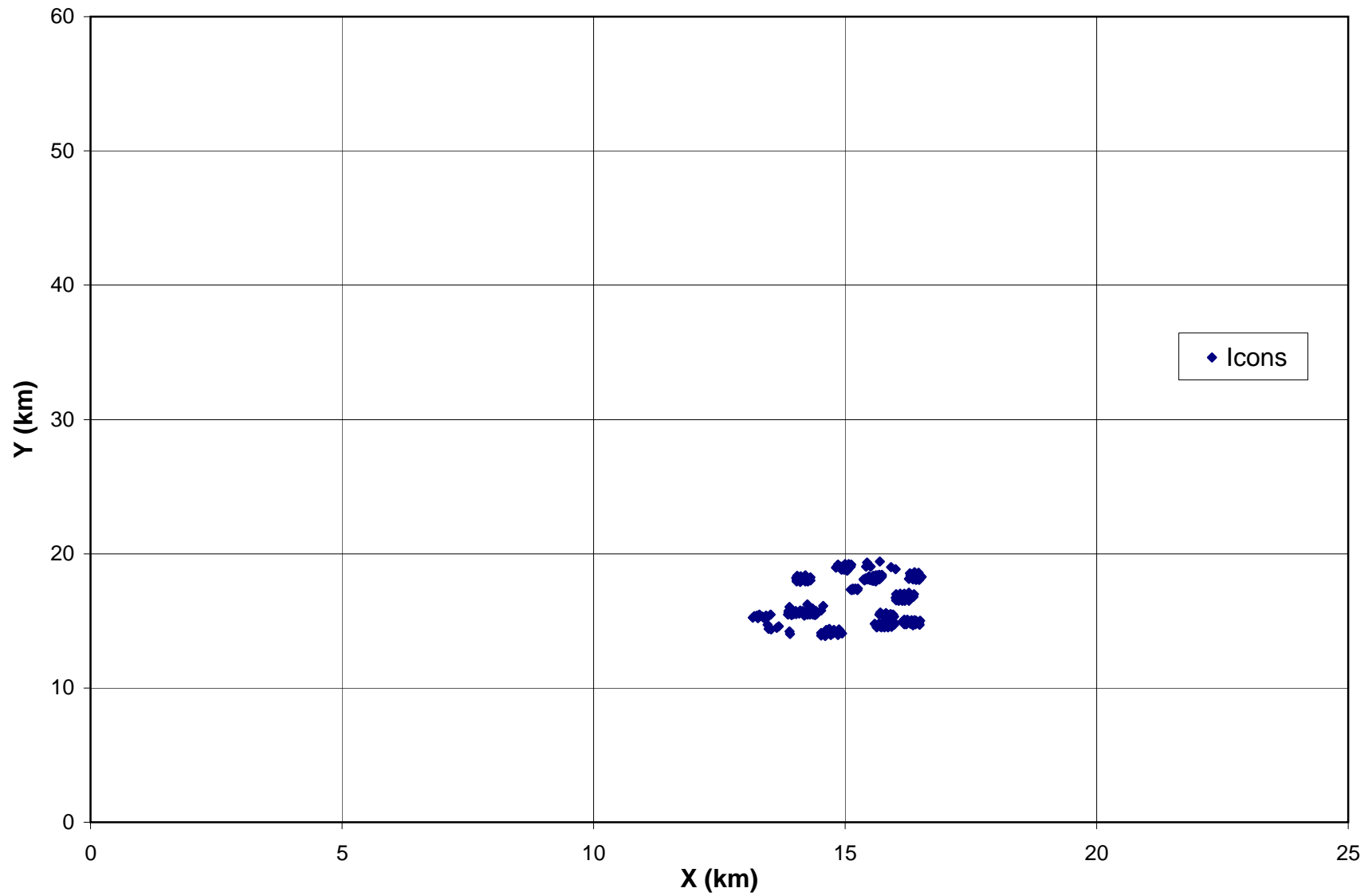


Figure E2
Unit Layout: Small Scale
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

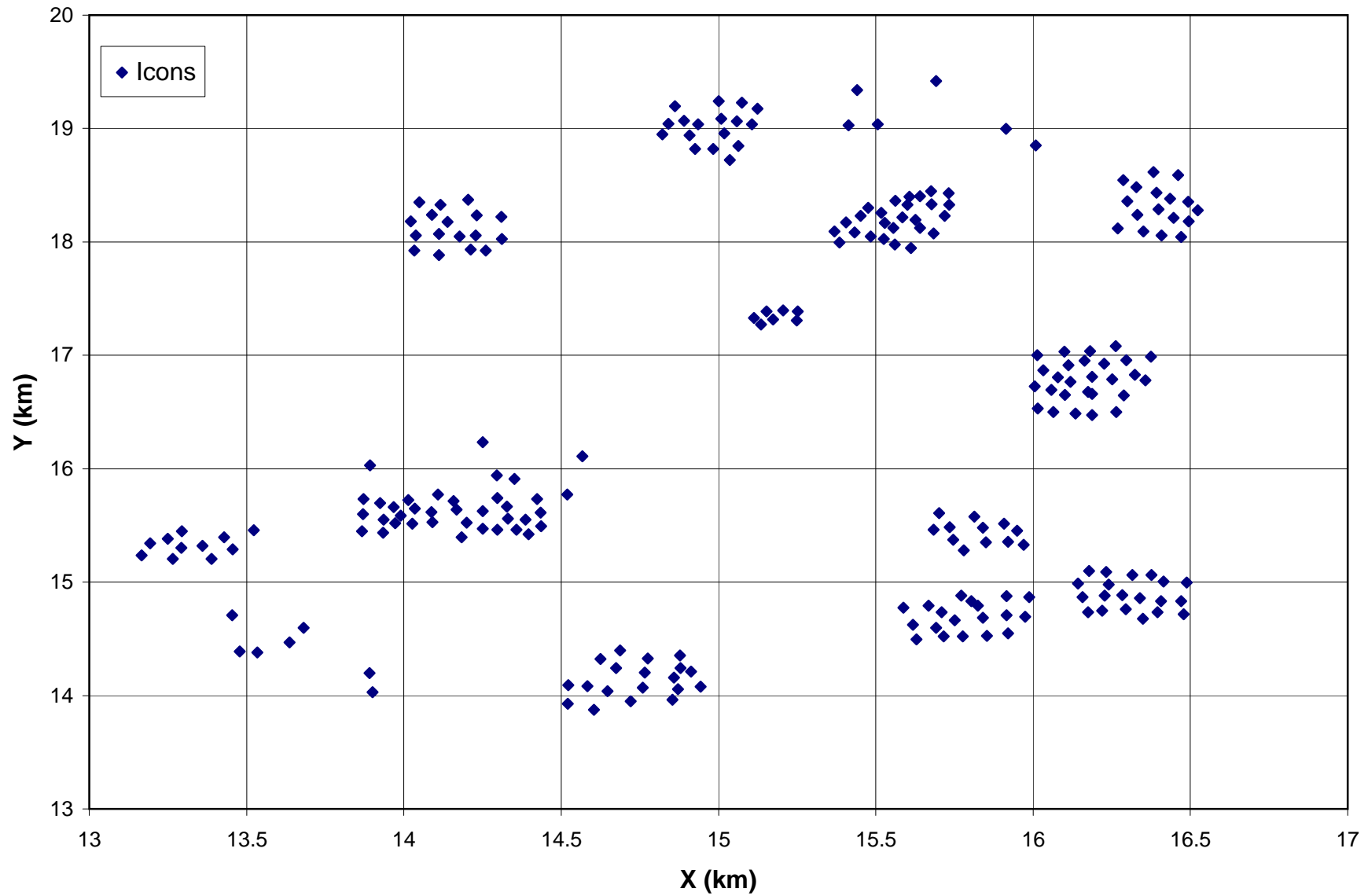


Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Sarin (GB) 152mm Artillery
Light Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (15.50, 19.10)							
28	15.433	18.082	4	8.80E-02	0.00E+00	8.80E-02	8.80E-02	0.00E+00	3.85E-04	8.84E-02	1
29	15.452	18.232	4	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.35E-02	1.69E+01	5
30	15.476	18.303	5	3.92E+01	0.00E+00	3.92E+01	3.92E+01	0.00E+00	1.72E-01	3.94E+01	6
31	15.526	18.028	4	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.63E-02	3.75E+00	3
94	15.517	18.257	1	4.74E+01	0.00E+00	4.74E+01	4.74E+01	0.00E+00	2.07E-01	4.76E+01	6
95	15.626	18.194	33	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.56E-02	3.58E+00	3
96	15.529	18.169	7	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5
97	15.607	18.398	28	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
98	15.562	18.363	5	5.89E+01	0.00E+00	5.89E+01	5.89E+01	0.00E+00	2.58E-01	5.92E+01	7
137	15.561	17.979	6	9.29E-03	0.00E+00	9.29E-03	9.29E-03	0.00E+00	4.06E-05	9.33E-03	1
138	15.585	18.218	2	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.80E-02	2.25E+01	5
139	15.506	19.036	2	1.01E+03	0.00E+00	1.01E+03	1.01E+03	0.00E+00	4.42E+00	1.01E+03	8
140	15.641	18.402	24	4.64E+00	0.00E+00	4.64E+00	4.64E+00	0.00E+00	2.03E-02	4.66E+00	3
141	15.601	18.327	10	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
144	15.555	18.123	4	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.57E-02	1.74E+01	5
220	15.484	18.048	3	4.82E+00	0.00E+00	4.82E+00	4.82E+00	0.00E+00	2.11E-02	4.84E+00	3
Case 2: Protected				18 rounds at aimpoint (15.60, 18.40)							
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	2.79E+02	0.00E+00	1.22E+00	1.22E+00	2
24	15.675	18.447	4	1.83E-06	0.00E+00	1.83E-06	1.81E-04	0.00E+00	7.92E-07	2.62E-06	1
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	1.32E+02	0.00E+00	5.78E-01	5.78E-01	2
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	3.06E+00	0.00E+00	1.34E-02	1.34E-02	1
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	8.24E-01	0.00E+00	3.61E-03	3.61E-03	1
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	2.53E+02	0.00E+00	1.11E+00	1.11E+00	2
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	1.62E+01	0.00E+00	7.09E-02	7.09E-02	1
97	15.607	18.398	28	4.62E+00	0.00E+00	4.62E+00	1.40E+02	0.00E+00	6.13E-01	5.23E+00	3
98	15.562	18.363	5	3.09E-04	0.00E+00	3.09E-04	3.23E+02	0.00E+00	1.41E+00	1.41E+00	2
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	3.87E+01	0.00E+00	1.69E-01	1.69E-01	1
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	4.12E+02	0.00E+00	1.80E+00	1.80E+00	2
140	15.641	18.402	24	3.42E+00	0.00E+00	3.42E+00	2.67E+02	0.00E+00	1.17E+00	4.59E+00	3
141	15.601	18.327	10	3.67E+01	0.00E+00	3.67E+01	3.32E+02	0.00E+00	1.45E+00	3.82E+01	6
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	1.72E+00	0.00E+00	7.53E-03	7.53E-03	1
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	8.17E+01	0.00E+00	3.57E-01	3.57E-01	2
203	15.677	18.330	1	1.24E+02	0.00E+00	1.24E+02	3.64E+02	0.00E+00	1.59E+00	1.26E+02	8
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	54.09066	0.00E+00	2.37E-01	2.37E-01	1

Sarin (GB) MRLS
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (16.00, 18.90)							
1	16.058	16.697	2	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.78E-02	1.56E+01	5
3	16.398	18.288	5	2.28E+00	0.00E+00	2.28E+00	2.28E+00	0.00E+00	9.98E-03	2.29E+00	2
6	16.013	17.002	2	3.55E+01	0.00E+00	3.55E+01	3.55E+01	0.00E+00	1.55E-01	3.57E+01	6
11	16.118	16.767	2	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.23E-02	1.89E+01	5
16	16.187	16.658	4	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.47E-02	1.26E+01	4
19	16.065	16.500	4	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.83E-02	6.49E+00	4
20	15.732	18.428	7	1.38E+02	0.00E+00	1.38E+02	1.38E+02	0.00E+00	6.04E-01	1.39E+02	8
21	16.357	16.781	7	4.03E+00	0.00E+00	4.03E+00	4.03E+00	0.00E+00	1.76E-02	4.05E+00	3
22	16.263	17.082	8	2.67E+01	0.00E+00	2.67E+01	2.67E+01	0.00E+00	1.17E-01	2.68E+01	5
23	15.640	18.125	6	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.03E-02	1.16E+01	4
24	15.675	18.447	4	3.76E+01	0.00E+00	3.76E+01	3.76E+01	0.00E+00	1.65E-01	3.78E+01	6
25	15.684	18.075	1	3.11E+01	0.00E+00	3.11E+01	3.11E+01	0.00E+00	1.36E-01	3.12E+01	6
31	15.526	18.028	4	6.27E-03	0.00E+00	6.27E-03	6.27E-03	0.00E+00	2.74E-05	6.30E-03	1
77	16.101	16.650	2	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.47E-02	1.26E+01	4

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

89	16.009	18.852	4	6.46E+02	0.00E+00	6.46E+02	6.46E+02	0.00E+00	2.83E+00	6.49E+02	8
90	15.914	18.998	4	5.28E+02	0.00E+00	5.28E+02	5.28E+02	0.00E+00	2.31E+00	5.30E+02	8
93	16.187	16.809	7	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.14E-02	2.10E+01	5
95	15.626	18.194	33	6.72E+00	0.00E+00	6.72E+00	6.72E+00	0.00E+00	2.94E-02	6.75E+00	4
96	15.529	18.169	7	7.29E+04	0.00E+00	7.29E-04	7.29E-04	0.00E+00	3.19E-06	7.32E-04	1
97	15.607	18.398	28	1.44E+00	0.00E+00	1.44E+00	1.44E+00	0.00E+00	6.30E-03	1.45E+00	2
98	15.562	18.363	5	1.14E-02	0.00E+00	1.14E-02	1.14E-02	0.00E+00	4.99E-05	1.14E-02	1
99	16.079	16.804	3	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.28E-02	2.13E+01	5
100	16.436	18.381	3	1.49E-02	0.00E+00	1.49E-02	1.49E-02	0.00E+00	6.52E-05	1.50E-02	1
101	16.286	18.545	1	3.22E+02	0.00E+00	3.22E+02	3.22E+02	0.00E+00	1.41E+00	3.23E+02	8
103	16.329	18.484	2	5.67E+01	0.00E+00	5.67E+01	5.67E+01	0.00E+00	2.48E-01	5.69E+01	7
104	16.470	18.045	6	3.51E-02	0.00E+00	3.51E-02	3.51E-02	0.00E+00	1.54E-04	3.53E-02	1
105	16.350	18.091	1	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
106	16.332	18.240	1	4.35E+01	0.00E+00	4.35E+01	4.35E+01	0.00E+00	1.90E-01	4.37E+01	6
108	16.408	18.056	12	3.62E+00	0.00E+00	3.62E+00	3.62E+00	0.00E+00	1.58E-02	3.64E+00	3
112	16.100	17.033	3	3.54E+01	0.00E+00	3.54E+01	3.54E+01	0.00E+00	1.55E-01	3.56E+01	6
121	16.226	16.924	3	2.44E+01	0.00E+00	2.44E+01	2.44E+01	0.00E+00	1.07E-01	2.45E+01	5
129	16.188	16.473	40	4.71E+00	0.00E+00	4.71E+00	4.71E+00	0.00E+00	2.06E-02	4.73E+00	3
131	16.175	16.676	2	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.86E-02	1.35E+01	4
132	16.015	16.530	5	8.26E+00	0.00E+00	8.26E+00	8.26E+00	0.00E+00	3.61E-02	8.30E+00	4
133	15.733	18.328	9	1.04E+02	0.00E+00	1.04E+02	1.04E+02	0.00E+00	4.55E-01	1.04E+02	8
135	16.324	16.829	12	8.35E+00	0.00E+00	8.35E+00	8.35E+00	0.00E+00	3.65E-02	8.39E+00	4
136	16.374	16.990	4	5.24E+00	0.00E+00	5.24E+00	5.24E+00	0.00E+00	2.29E-02	5.26E+00	3
137	15.561	17.979	6	6.97E-01	0.00E+00	6.97E-01	6.97E-01	0.00E+00	3.05E-03	7.00E-01	2
138	15.585	18.218	2	1.02E+00	0.00E+00	1.02E+00	1.02E+00	0.00E+00	4.46E-03	1.02E+00	2
140	15.641	18.402	24	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.68E-02	1.07E+01	4
141	15.601	18.327	10	1.26E+00	0.00E+00	1.26E+00	1.26E+00	0.00E+00	5.51E-03	1.27E+00	2
143	15.719	18.229	16	6.90E+01	0.00E+00	6.90E+01	6.90E+01	0.00E+00	3.02E-01	6.93E+01	7
144	15.555	18.123	4	1.56E-01	0.00E+00	1.56E-01	1.56E-01	0.00E+00	6.83E-04	1.57E-01	1
185	16.181	17.037	4	3.38E+01	0.00E+00	3.38E+01	3.38E+01	0.00E+00	1.48E-01	3.39E+01	6
186	16.296	16.955	4	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.13E-02	1.64E+01	5
187	16.163	16.951	4	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
189	16.264	16.500	4	3.89E+00	0.00E+00	3.89E+00	3.89E+00	0.00E+00	1.70E-02	3.91E+00	3
190	16.032	16.870	4	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
191	16.288	16.648	4	7.26E+00	0.00E+00	7.26E+00	7.26E+00	0.00E+00	3.18E-02	7.29E+00	4
192	16.005	16.725	4	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.92E-02	1.82E+01	5
193	16.112	16.912	4	2.76E+01	0.00E+00	2.76E+01	2.76E+01	0.00E+00	1.21E-01	2.77E+01	5
194	16.252	16.789	4	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.13E-02	1.64E+01	5
203	15.677	18.330	1	3.31E+01	0.00E+00	3.31E+01	3.31E+01	0.00E+00	1.45E-01	3.32E+01	6
209	16.134	16.486	1	4.92E+00	0.00E+00	4.92E+00	4.92E+00	0.00E+00	2.15E-02	4.94E+00	3
215	16.269	18.118	2	1.04E+02	0.00E+00	1.04E+02	1.04E+02	0.00E+00	4.55E-01	1.04E+02	8
221	16.393	18.433	10	1.42E+00	0.00E+00	1.42E+00	1.42E+00	0.00E+00	6.21E-03	1.43E+00	2
222	16.447	18.213	2	5.57E-02	0.00E+00	5.57E-02	5.57E-02	0.00E+00	2.44E-04	5.59E-02	1
223	16.300	18.359	2	1.18E+02	0.00E+00	1.18E+02	1.18E+02	0.00E+00	5.16E-01	1.19E+02	8
226	16.382	18.616	1	1.81E-01	0.00E+00	1.81E-01	1.81E-01	0.00E+00	7.92E-04	1.82E-01	1
238	15.612	17.946	2	5.74E+00	0.00E+00	5.74E+00	5.74E+00	0.00E+00	2.51E-02	5.77E+00	3

Case 2: Protected 240 rounds at aimpoint (16.40, 16.70)

1	16.058	16.697	2	4.47E+01	0.00E+00	4.47E+01	4.73E+01	0.00E+00	2.07E-01	4.49E+01	6
11	16.118	16.767	2	1.45E+02	0.00E+00	1.45E+02	4.74E+02	0.00E+00	2.07E+00	1.47E+02	8
16	16.187	16.658	4	8.90E+01	0.00E+00	8.90E+01	4.17E+02	0.00E+00	1.82E+00	9.08E+01	8
19	16.065	16.500	4	0.00E+00	0.00E+00	0.00E+00	6.18E+01	0.00E+00	2.70E-01	2.70E-01	2
21	16.357	16.781	7	7.90E+00	0.00E+00	7.90E+00	2.93E+02	0.00E+00	1.28E+00	9.18E+00	4
77	16.101	16.650	2	1.38E+01	0.00E+00	1.38E+01	1.63E+02	0.00E+00	7.13E-01	1.45E+01	4
93	16.187	16.809	7	7.36E+00	0.00E+00	7.36E+00	2.74E+02	0.00E+00	1.20E+00	8.56E+00	4
99	16.079	16.804	3	9.06E+00	0.00E+00	9.06E+00	1.64E+01	0.00E+00	7.18E-02	9.13E+00	4
121	16.226	16.924	3	1.56E+01	0.00E+00	1.56E+01	2.22E+01	0.00E+00	9.71E-02	1.57E+01	5
129	16.188	16.473	40	2.91E+01	0.00E+00	2.91E+01	4.64E+02	0.00E+00	2.03E+00	3.11E+01	6
131	16.175	16.676	2	2.46E+01	0.00E+00	2.46E+01	5.61E+02	0.00E+00	2.45E+00	2.71E+01	5
135	16.324	16.829	12	2.93E+01	0.00E+00	2.93E+01	4.88E+02	0.00E+00	2.14E+00	3.14E+01	6
136	16.374	16.990	4	5.02E+01	0.00E+00	5.02E+01	9.17E+01	0.00E+00	4.01E-01	5.06E+01	7
186	16.296	16.955	4	3.31E+00	0.00E+00	3.31E+00	7.09E+01	0.00E+00	3.10E-01	3.62E+00	3
187	16.163	16.951	4	5.89E+00	0.00E+00	5.89E+00	9.09E+00	0.00E+00	3.98E-02	5.93E+00	3
189	16.264	16.500	4	1.54E+02	0.00E+00	1.54E+02	7.16E+02	0.00E+00	3.13E+00	1.57E+02	8
191	16.288	16.648	4	6.17E+01	0.00E+00	6.17E+01	5.72E+02	0.00E+00	2.50E+00	6.42E+01	7
194	16.252	16.789	4	6.35E+01	0.00E+00	6.35E+01	6.41E+02	0.00E+00	2.80E+00	6.63E+01	7
209	16.134	16.486	1	7.24E+01	0.00E+00	7.24E+01	3.60E+02	0.00E+00	1.58E+00	7.40E+01	7

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				720 rounds at aimpoint (16.20, 20.00)							
1	16.058	16.697	2	5.91E+00	0.00E+00	5.91E+00	5.91E+00	0.00E+00	2.59E-02	5.94E+00	3
2	16.495	18.182	2	5.19E+01	0.00E+00	5.19E+01	5.19E+01	0.00E+00	2.27E-01	5.21E+01	7
3	16.398	18.288	5	6.19E+01	0.00E+00	6.19E+01	6.19E+01	0.00E+00	2.71E-01	6.22E+01	7
6	16.013	17.002	2	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.51E-02	1.27E+01	4
11	16.118	16.767	2	7.52E+00	0.00E+00	7.52E+00	7.52E+00	0.00E+00	3.29E-02	7.55E+00	4
16	16.187	16.658	4	5.79E+00	0.00E+00	5.79E+00	5.79E+00	0.00E+00	2.53E-02	5.82E+00	3
19	16.065	16.500	4	2.87E+00	0.00E+00	2.87E+00	2.87E+00	0.00E+00	1.26E-02	2.88E+00	2
20	15.732	18.428	7	3.69E+01	0.00E+00	3.69E+01	3.69E+01	0.00E+00	1.61E-01	3.71E+01	6
21	16.357	16.781	7	7.51E+00	0.00E+00	7.51E+00	7.51E+00	0.00E+00	3.29E-02	7.54E+00	4
22	16.263	17.082	8	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.18E-02	1.65E+01	5
23	15.640	18.125	6	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.30E-02	1.45E+01	4
24	15.675	18.447	4	2.54E+01	0.00E+00	2.54E+01	2.54E+01	0.00E+00	1.11E-01	2.55E+01	5
25	15.684	18.075	1	1.97E+01	0.00E+00	1.97E+01	1.97E+01	0.00E+00	8.62E-02	1.98E+01	5
27	15.405	18.172	4	2.44E-02	0.00E+00	2.44E-02	2.44E-02	0.00E+00	1.07E-04	2.45E-02	1
28	15.433	18.082	4	1.69E-01	0.00E+00	1.69E-01	1.69E-01	0.00E+00	7.39E-04	1.70E-01	1
29	15.452	18.232	4	2.85E-01	0.00E+00	2.85E-01	2.85E-01	0.00E+00	1.25E-03	2.86E-01	2
30	15.476	18.303	5	9.07E-01	0.00E+00	9.07E-01	9.07E-01	0.00E+00	3.97E-03	9.11E-01	2
31	15.526	18.028	4	3.03E+00	0.00E+00	3.03E+00	3.03E+00	0.00E+00	1.33E-02	3.04E+00	3
77	16.101	16.650	2	5.24E+00	0.00E+00	5.24E+00	5.24E+00	0.00E+00	2.29E-02	5.26E+00	3
89	16.009	18.852	4	1.14E+02	0.00E+00	1.14E+02	1.14E+02	0.00E+00	4.99E-01	1.14E+02	8
90	15.914	18.998	4	1.24E+02	0.00E+00	1.24E+02	1.24E+02	0.00E+00	5.43E-01	1.25E+02	8
91	15.692	19.420	4	1.19E+02	0.00E+00	1.19E+02	1.19E+02	0.00E+00	5.21E-01	1.20E+02	8
93	16.187	16.809	7	8.70E+00	0.00E+00	8.70E+00	8.70E+00	0.00E+00	3.81E-02	8.74E+00	4
94	15.517	18.257	1	2.69E+00	0.00E+00	2.69E+00	2.69E+00	0.00E+00	1.18E-02	2.70E+00	2
95	15.626	18.194	33	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.82E-02	1.34E+01	4
96	15.529	18.169	7	3.41E+00	0.00E+00	3.41E+00	3.41E+00	0.00E+00	1.49E-02	3.42E+00	3
97	15.607	18.398	28	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
98	15.562	18.363	5	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.79E-02	6.41E+00	4
99	16.079	16.804	3	8.05E+00	0.00E+00	8.05E+00	8.05E+00	0.00E+00	3.52E-02	8.09E+00	4
100	16.436	18.381	3	6.47E+01	0.00E+00	6.47E+01	6.47E+01	0.00E+00	2.83E-01	6.50E+01	7
101	16.286	18.545	1	8.72E+01	0.00E+00	8.72E+01	8.72E+01	0.00E+00	3.82E-01	8.76E+01	8
102	16.523	18.281	2	5.49E+01	0.00E+00	5.49E+01	5.49E+01	0.00E+00	2.40E-01	5.51E+01	7
103	16.329	18.484	2	7.84E+01	0.00E+00	7.84E+01	7.84E+01	0.00E+00	3.43E-01	7.87E+01	8
104	16.470	18.045	6	4.70E+01	0.00E+00	4.70E+01	4.70E+01	0.00E+00	2.06E-01	4.72E+01	6
105	16.350	18.091	1	5.45E+01	0.00E+00	5.45E+01	5.45E+01	0.00E+00	2.38E-01	5.47E+01	7
106	16.332	18.240	1	6.29E+01	0.00E+00	6.29E+01	6.29E+01	0.00E+00	2.75E-01	6.32E+01	7
107	16.493	18.354	6	6.05E+01	0.00E+00	6.05E+01	6.05E+01	0.00E+00	2.65E-01	6.08E+01	7
108	16.408	18.056	12	5.06E+01	0.00E+00	5.06E+01	5.06E+01	0.00E+00	2.21E-01	5.08E+01	7
112	16.100	17.033	3	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.21E-02	1.43E+01	4
121	16.226	16.924	3	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.16E-02	1.19E+01	4
129	16.188	16.473	40	3.00E+00	0.00E+00	3.00E+00	3.00E+00	0.00E+00	1.31E-02	3.01E+00	3
131	16.175	16.676	2	6.07E+00	0.00E+00	6.07E+00	6.07E+00	0.00E+00	2.66E-02	6.10E+00	4
132	16.015	16.530	5	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.34E-02	3.07E+00	3
133	15.733	18.328	9	3.39E+01	0.00E+00	3.39E+01	3.39E+01	0.00E+00	1.48E-01	3.40E+01	6
135	16.324	16.829	12	9.04E+00	0.00E+00	9.04E+00	9.04E+00	0.00E+00	3.96E-02	9.08E+00	4
136	16.374	16.990	4	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.47E-02	1.26E+01	4
137	15.561	17.979	6	5.21E+00	0.00E+00	5.21E+00	5.21E+00	0.00E+00	2.28E-02	5.23E+00	3
138	15.585	18.218	2	8.43E+00	0.00E+00	8.43E+00	8.43E+00	0.00E+00	3.69E-02	8.47E+00	4
139	15.506	19.036	2	5.00E-01	0.00E+00	5.00E-01	5.00E-01	0.00E+00	2.19E-03	5.02E-01	2
140	15.641	18.402	24	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.83E-02	1.80E+01	5
141	15.601	18.327	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.68E-02	1.07E+01	4
143	15.719	18.229	16	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.25E-01	2.87E+01	5
144	15.555	18.123	4	5.12E+00	0.00E+00	5.12E+00	5.12E+00	0.00E+00	2.24E-02	5.14E+00	3
185	16.181	17.037	4	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.48E-02	1.49E+01	4
186	16.296	16.955	4	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.47E-02	1.26E+01	4
187	16.163	16.951	4	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
189	16.264	16.500	4	3.44E+00	0.00E+00	3.44E+00	3.44E+00	0.00E+00	1.51E-02	3.46E+00	3
190	16.032	16.870	4	9.49E+00	0.00E+00	9.49E+00	9.49E+00	0.00E+00	4.15E-02	9.53E+00	4
191	16.288	16.648	4	5.62E+00	0.00E+00	5.62E+00	5.62E+00	0.00E+00	2.46E-02	5.64E+00	3

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

192	16.005	16.725	4	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.73E-02	6.28E+00	4
193	16.112	16.912	4	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.77E-02	1.09E+01	4
194	16.252	16.789	4	8.56E+00	0.00E+00	8.56E+00	8.56E+00	0.00E+00	3.75E-02	8.60E+00	4
203	15.677	18.330	1	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.02E-01	2.35E+01	5
204	16.461	18.591	1	7.65E+01	0.00E+00	7.65E+01	7.65E+01	0.00E+00	3.35E-01	7.68E+01	8
209	16.134	16.486	1	2.98E+00	0.00E+00	2.98E+00	2.98E+00	0.00E+00	1.30E-02	2.99E+00	2
215	16.269	18.118	2	5.92E+01	0.00E+00	5.92E+01	5.92E+01	0.00E+00	2.59E-01	5.95E+01	7
220	15.484	18.048	3	1.11E+00	0.00E+00	1.11E+00	1.11E+00	0.00E+00	4.86E-03	1.11E+00	2
221	16.393	18.433	10	7.01E+01	0.00E+00	7.01E+01	7.01E+01	0.00E+00	3.07E-01	7.04E+01	7
222	16.447	18.213	2	5.58E+01	0.00E+00	5.58E+01	5.58E+01	0.00E+00	2.44E-01	5.60E+01	7
223	16.300	18.359	2	7.21E+01	0.00E+00	7.21E+01	7.21E+01	0.00E+00	3.15E-01	7.24E+01	7
226	16.382	18.616	1	8.32E+01	0.00E+00	8.32E+01	8.32E+01	0.00E+00	3.64E-01	8.36E+01	8
238	15.612	17.946	2	9.42E+00	0.00E+00	9.42E+00	9.42E+00	0.00E+00	4.12E-02	9.46E+00	4
Case 2: Protected 720 rounds at aimpoint (15.40, 18.90)											
6	16.013	17.002	2	0.00E+00	0.00E+00	0.00E+00	1.06E-02	0.00E+00	4.64E-05	4.64E-05	1
8	15.018	18.957	5	1.31E+02	0.00E+00	1.31E+02	3.24E+02	0.00E+00	1.42E+00	1.32E+02	8
9	14.935	19.036	1	1.23E+02	0.00E+00	1.23E+02	2.99E+02	0.00E+00	1.31E+00	1.24E+02	8
10	15.059	19.065	2	2.31E+02	0.00E+00	2.31E+02	3.54E+02	0.00E+00	1.55E+00	2.33E+02	8
15	15.135	17.274	2	0.00E+00	0.00E+00	0.00E+00	1.38E+01	0.00E+00	6.04E-02	6.04E-02	1
17	15.252	17.386	4	0.00E+00	0.00E+00	0.00E+00	2.79E+01	0.00E+00	1.22E-01	1.22E-01	1
18	15.173	17.315	9	0.00E+00	0.00E+00	0.00E+00	1.84E+01	0.00E+00	8.05E-02	8.05E-02	1
20	15.732	18.428	7	1.50E+02	0.00E+00	1.50E+02	4.66E+02	0.00E+00	2.04E+00	1.52E+02	8
23	15.640	18.125	6	3.37E-01	0.00E+00	3.37E-01	1.47E+02	0.00E+00	6.43E-01	9.80E-01	2
24	15.675	18.447	4	1.39E+02	0.00E+00	1.39E+02	3.91E+02	0.00E+00	1.71E+00	1.41E+02	8
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	1.45E+02	0.00E+00	6.34E-01	6.34E-01	2
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	1.58E+02	0.00E+00	6.91E-01	6.91E-01	2
27	15.405	18.172	4	1.36E+00	0.00E+00	1.36E+00	2.26E+02	0.00E+00	9.89E-01	2.35E+00	2
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	1.93E+02	0.00E+00	8.44E-01	8.44E-01	2
29	15.452	18.232	4	2.36E+01	0.00E+00	2.36E+01	2.83E+02	0.00E+00	1.24E+00	2.48E+01	5
30	15.476	18.303	5	1.98E+01	0.00E+00	1.98E+01	3.64E+02	0.00E+00	1.59E+00	2.14E+01	5
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	1.59E+02	0.00E+00	6.96E-01	6.96E-01	2
32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	1.99E+02	0.00E+00	8.71E-01	8.71E-01	2
72	15.153	17.386	2	0.00E+00	0.00E+00	0.00E+00	2.57E+01	0.00E+00	1.12E-01	1.12E-01	1
82	15.413	19.029	3	7.99E+01	0.00E+00	7.99E+01	3.57E+02	0.00E+00	1.56E+00	8.15E+01	8
89	16.009	18.852	4	0.00E+00	0.00E+00	0.00E+00	3.22E-03	0.00E+00	1.41E-05	1.41E-05	1
90	15.914	18.998	4	1.32E+02	0.00E+00	1.32E+02	2.09E+02	0.00E+00	9.14E-01	1.33E+02	8
91	15.692	19.420	4	6.76E+01	0.00E+00	6.76E+01	7.97E+01	0.00E+00	3.49E-01	6.79E+01	7
92	15.441	19.341	4	7.85E+01	0.00E+00	7.85E+01	1.53E+02	0.00E+00	6.69E-01	7.92E+01	8
94	15.517	18.257	1	8.19E-02	0.00E+00	8.19E-02	3.39E+02	0.00E+00	1.48E+00	1.57E+00	2
95	15.626	18.194	33	3.03E+00	0.00E+00	3.03E+00	1.78E+02	0.00E+00	7.79E-01	3.81E+00	3
96	15.529	18.169	7	2.29E-02	0.00E+00	2.29E-02	2.47E+02	0.00E+00	1.08E+00	1.10E+00	2
97	15.607	18.398	28	6.83E+00	0.00E+00	6.83E+00	2.79E+02	0.00E+00	1.22E+00	8.05E+00	4
98	15.562	18.363	5	7.24E+01	0.00E+00	7.24E+01	3.88E+02	0.00E+00	1.70E+00	7.41E+01	7
119	15.063	18.848	4	8.13E+01	0.00E+00	8.13E+01	3.09E+02	0.00E+00	1.35E+00	8.27E+01	8
120	15.074	19.229	12	1.54E+02	0.00E+00	1.54E+02	2.72E+02	0.00E+00	1.19E+00	1.55E+02	8
122	15.000	19.241	2	9.23E+00	0.00E+00	9.23E+00	8.43E+01	0.00E+00	3.69E-01	9.60E+00	4
123	14.861	19.198	1	6.26E+00	0.00E+00	6.26E+00	2.68E+01	0.00E+00	1.17E-01	6.38E+00	4
124	15.107	19.036	1	2.83E+02	0.00E+00	2.83E+02	6.11E+02	0.00E+00	2.67E+00	2.86E+02	8
125	15.009	19.087	2	7.64E+01	0.00E+00	7.64E+01	2.93E+02	0.00E+00	1.28E+00	7.77E+01	8
126	14.890	19.069	1	4.36E+01	0.00E+00	4.36E+01	1.92E+02	0.00E+00	8.40E-01	4.44E+01	6
127	14.841	19.040	1	4.62E+01	0.00E+00	4.62E+01	6.91E+01	0.00E+00	3.02E-01	4.65E+01	6
128	15.124	19.175	4	2.16E+02	0.00E+00	2.16E+02	4.23E+02	0.00E+00	1.85E+00	2.18E+02	8
130	15.248	17.308	16	0.00E+00	0.00E+00	0.00E+00	1.97E+01	0.00E+00	8.62E-02	8.62E-02	1
133	15.733	18.328	9	3.23E+01	0.00E+00	3.23E+01	3.56E+02	0.00E+00	1.56E+00	3.39E+01	6
134	15.206	17.396	10	0.00E+00	0.00E+00	0.00E+00	2.84E+01	0.00E+00	1.24E-01	1.24E-01	1
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	1.30E+02	0.00E+00	5.69E-01	5.69E-01	2
138	15.585	18.218	2	5.53E+00	0.00E+00	5.53E+00	2.37E+02	0.00E+00	1.04E+00	6.57E+00	4
139	15.506	19.036	2	4.46E+01	0.00E+00	4.46E+01	2.16E+02	0.00E+00	9.45E-01	4.55E+01	6
140	15.641	18.402	24	5.23E+00	0.00E+00	5.23E+00	2.13E+02	0.00E+00	9.32E-01	6.16E+00	4
141	15.601	18.327	10	1.15E+01	0.00E+00	1.15E+01	2.67E+02	0.00E+00	1.17E+00	1.27E+01	4
143	15.719	18.229	16	1.04E-03	0.00E+00	1.04E-03	2.74E+02	0.00E+00	1.20E+00	1.20E+00	2
144	15.555	18.123	4	1.54E-01	0.00E+00	1.54E-01	1.89E+02	0.00E+00	8.27E-01	9.81E-01	2
203	15.677	18.330	1	3.05E+01	0.00E+00	3.05E+01	2.96E+02	0.00E+00	1.30E+00	3.18E+01	6
207	14.908	18.942	1	4.91E+01	0.00E+00	4.91E+01	2.52E+02	0.00E+00	1.10E+00	5.02E+01	7
208	14.822	18.948	1	6.29E+01	0.00E+00	6.29E+01	9.40E+01	0.00E+00	4.11E-01	6.33E+01	7
218	14.983	18.822	8	1.85E+02	0.00E+00	1.85E+02	5.26E+02	0.00E+00	2.30E+00	1.87E+02	8
219	14.925	18.819	5	2.02E+02	0.00E+00	2.02E+02	4.93E+02	0.00E+00	2.16E+00	2.04E+02	8
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	1.82E+02	0.00E+00	7.96E-01	7.96E-01	2

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

225	15.036	18.722	4	7.12E+01	0.00E+00	7.12E+01	3.71E+02	0.00E+00	1.62E+00	7.28E+01	7
227	15.113	17.328	1	0.00E+00	0.00E+00	0.00E+00	1.73E+01	0.00E+00	7.57E-02	7.57E-02	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	1.12E+02	0.00E+00	4.90E-01	4.90E-01	2

Sarin (GB) 250kg Bomb
Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				2 rounds at aimpoint (15.50, 19.70)							
20	15.732	18.428	7	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.39E-02	1.47E+01	4
23	15.640	18.125	6	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
24	15.675	18.447	4	2.10E+01	0.00E+00	2.10E+01	2.10E+01	0.00E+00	9.19E-02	2.11E+01	5
25	15.684	18.075	1	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.12E-02	1.18E+01	4
26	15.384	17.995	5	8.97E+00	0.00E+00	8.97E+00	8.97E+00	0.00E+00	3.92E-02	9.01E+00	4
27	15.405	18.172	4	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.91E-02	1.36E+01	4
28	15.433	18.082	4	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.16E-02	1.19E+01	4
29	15.452	18.232	4	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.04E-02	1.39E+01	4
30	15.476	18.303	5	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.91E-02	1.36E+01	4
32	15.369	18.094	4	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.51E-02	1.03E+01	4
82	15.413	19.029	3	5.13E+01	0.00E+00	5.13E+01	5.13E+01	0.00E+00	2.24E-01	5.15E+01	7
91	15.692	19.420	4	1.21E+02	0.00E+00	1.21E+02	1.21E+02	0.00E+00	5.29E-01	1.22E+02	8
92	15.441	19.341	4	1.02E+02	0.00E+00	1.02E+02	1.02E+02	0.00E+00	4.46E-01	1.02E+02	8
94	15.517	18.257	1	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.73E-02	6.26E+00	4
95	15.626	18.194	33	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.64E-02	1.30E+01	4
96	15.529	18.169	7	2.22E+00	0.00E+00	2.22E+00	2.22E+00	0.00E+00	9.71E-03	2.23E+00	2
97	15.607	18.398	28	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
98	15.562	18.363	5	6.47E+00	0.00E+00	6.47E+00	6.47E+00	0.00E+00	2.83E-02	6.50E+00	4
133	15.733	18.328	9	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
137	15.561	17.979	6	2.76E-01	0.00E+00	2.76E-01	2.76E-01	0.00E+00	1.21E-03	2.77E-01	2
138	15.585	18.218	2	8.08E+00	0.00E+00	8.08E+00	8.08E+00	0.00E+00	3.54E-02	8.12E+00	4
139	15.506	19.036	2	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
140	15.641	18.402	24	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	7.96E-02	1.83E+01	5
141	15.601	18.327	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.60E-02	1.29E+01	4
143	15.719	18.229	16	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
144	15.555	18.123	4	1.03E+00	0.00E+00	1.03E+00	1.03E+00	0.00E+00	4.51E-03	1.03E+00	2
203	15.677	18.330	1	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.57E-02	1.74E+01	5
220	15.484	18.048	3	6.64E+00	0.00E+00	6.64E+00	6.64E+00	0.00E+00	2.91E-02	6.67E+00	4
238	15.612	17.946	2	5.86E+00	0.00E+00	5.86E+00	5.86E+00	0.00E+00	2.56E-02	5.89E+00	3
Case 2: Protected				2 rounds at aimpoint (16.30, 16.50)							
129	16.188	16.473	40	8.88E+00	0.00E+00	8.88E+00	1.15E+01	0.00E+00	5.03E-02	8.93E+00	4

Sarin (GB) 250kg Bomb
Moderate Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 12 rounds at aimpoint (15.90, 20.00)											
1	16.058	16.697	2	8.88E+00	0.00E+00	8.88E+00	8.88E+00	0.00E+00	3.89E-02	8.92E+00	4
2	16.495	18.182	2	3.97E-01	0.00E+00	3.97E-01	3.97E-01	0.00E+00	1.74E-03	3.99E-01	2
3	16.398	18.288	5	5.40E+00	0.00E+00	5.40E+00	5.40E+00	0.00E+00	2.36E-02	5.42E+00	3
6	16.013	17.002	2	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
11	16.118	16.767	2	9.54E+00	0.00E+00	9.54E+00	9.54E+00	0.00E+00	4.17E-02	9.58E+00	4
16	16.187	16.658	4	7.05E+00	0.00E+00	7.05E+00	7.05E+00	0.00E+00	3.08E-02	7.08E+00	4
19	16.065	16.500	4	5.95E+00	0.00E+00	5.95E+00	5.95E+00	0.00E+00	2.60E-02	5.98E+00	3
20	15.732	18.428	7	2.84E+01	0.00E+00	2.84E+01	2.84E+01	0.00E+00	1.24E-01	2.85E+01	5
21	16.357	16.781	7	2.95E+00	0.00E+00	2.95E+00	2.95E+00	0.00E+00	1.29E-02	2.96E+00	2
22	16.263	17.082	8	8.50E+00	0.00E+00	8.50E+00	8.50E+00	0.00E+00	3.72E-02	8.54E+00	4
23	15.640	18.125	6	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.55E-02	1.04E+01	4
24	15.675	18.447	4	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.23E-02	1.89E+01	5

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

25	15.684	18.075	1	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.52E-02	1.50E+01	4
29	15.452	18.232	4	2.92E-02	0.00E+00	2.92E-02	2.92E-02	0.00E+00	1.28E-04	2.93E-02	1
30	15.476	18.303	5	3.36E-01	0.00E+00	3.36E-01	3.36E-01	0.00E+00	1.47E-03	3.37E-01	2
31	15.526	18.028	4	1.83E+00	0.00E+00	1.83E+00	1.83E+00	0.00E+00	8.01E-03	1.84E+00	2
77	16.101	16.650	2	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.58E-02	8.22E+00	4
89	16.009	18.852	4	5.84E+01	0.00E+00	5.84E+01	5.84E+01	0.00E+00	2.56E-01	5.87E+01	7
90	15.914	18.998	4	6.82E+01	0.00E+00	6.82E+01	6.82E+01	0.00E+00	2.98E-01	6.85E+01	7
91	15.692	19.420	4	5.58E+01	0.00E+00	5.58E+01	5.58E+01	0.00E+00	2.44E-01	5.60E+01	7
93	16.187	16.809	7	8.72E+00	0.00E+00	8.72E+00	8.72E+00	0.00E+00	3.82E-02	8.76E+00	4
94	15.517	18.257	1	1.30E+00	0.00E+00	1.30E+00	1.30E+00	0.00E+00	5.69E-03	1.31E+00	2
95	15.626	18.194	33	9.26E+00	0.00E+00	9.26E+00	9.26E+00	0.00E+00	4.05E-02	9.30E+00	4
96	15.529	18.169	7	1.88E+00	0.00E+00	1.88E+00	1.88E+00	0.00E+00	8.23E-03	1.89E+00	2
97	15.607	18.398	28	7.88E+00	0.00E+00	7.88E+00	7.88E+00	0.00E+00	3.45E-02	7.91E+00	4
98	15.562	18.363	5	3.62E+00	0.00E+00	3.62E+00	3.62E+00	0.00E+00	1.58E-02	3.64E+00	3
99	16.079	16.804	3	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.51E-02	1.03E+01	4
100	16.436	18.381	3	2.55E+00	0.00E+00	2.55E+00	2.55E+00	0.00E+00	1.12E-02	2.56E+00	2
101	16.286	18.545	1	2.56E+01	0.00E+00	2.56E+01	2.56E+01	0.00E+00	1.12E-01	2.57E+01	5
102	16.523	18.281	2	1.88E-02	0.00E+00	1.88E-02	1.88E-02	0.00E+00	8.23E-05	1.89E-02	1
103	16.329	18.484	2	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.09E-02	1.63E+01	5
104	16.470	18.045	6	1.44E+00	0.00E+00	1.44E+00	1.44E+00	0.00E+00	6.30E-03	1.45E+00	2
105	16.350	18.091	1	9.94E+00	0.00E+00	9.94E+00	9.94E+00	0.00E+00	4.35E-02	9.98E+00	4
106	16.332	18.240	1	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.69E-02	1.31E+01	4
107	16.493	18.354	6	2.31E-01	0.00E+00	2.31E-01	2.31E-01	0.00E+00	1.01E-03	2.32E-01	1
108	16.408	18.056	12	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.08E-02	4.78E+00	3
112	16.100	17.033	3	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
121	16.226	16.924	3	8.61E+00	0.00E+00	8.61E+00	8.61E+00	0.00E+00	3.77E-02	8.65E+00	4
129	16.188	16.473	40	5.19E+00	0.00E+00	5.19E+00	5.19E+00	0.00E+00	2.27E-02	5.21E+00	3
131	16.175	16.676	2	7.47E+00	0.00E+00	7.47E+00	7.47E+00	0.00E+00	3.27E-02	7.50E+00	4
132	16.015	16.530	5	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.82E-02	6.47E+00	4
133	15.733	18.328	9	2.57E+01	0.00E+00	2.57E+01	2.57E+01	0.00E+00	1.12E-01	2.58E+01	5
135	16.324	16.829	12	4.33E+00	0.00E+00	4.33E+00	4.33E+00	0.00E+00	1.89E-02	4.35E+00	3
136	16.374	16.990	4	3.19E+00	0.00E+00	3.19E+00	3.19E+00	0.00E+00	1.40E-02	3.20E+00	3
137	15.561	17.979	6	3.47E+00	0.00E+00	3.47E+00	3.47E+00	0.00E+00	1.52E-02	3.49E+00	3
138	15.585	18.218	2	5.42E+00	0.00E+00	5.42E+00	5.42E+00	0.00E+00	2.37E-02	5.44E+00	3
139	15.506	19.036	2	1.85E-02	0.00E+00	1.85E-02	1.85E-02	0.00E+00	8.09E-05	1.86E-02	1
140	15.641	18.402	24	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.38E-02	1.24E+01	4
141	15.601	18.327	10	6.76E+00	0.00E+00	6.76E+00	6.76E+00	0.00E+00	2.96E-02	6.79E+00	4
143	15.719	18.229	16	2.11E+01	0.00E+00	2.11E+01	2.11E+01	0.00E+00	9.23E-02	2.12E+01	5
144	15.555	18.123	4	3.11E+00	0.00E+00	3.11E+00	3.11E+00	0.00E+00	1.36E-02	3.12E+00	3
185	16.181	17.037	4	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4
186	16.296	16.955	4	6.07E+00	0.00E+00	6.07E+00	6.07E+00	0.00E+00	2.66E-02	6.10E+00	4
187	16.163	16.951	4	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4
189	16.264	16.500	4	3.84E+00	0.00E+00	3.84E+00	3.84E+00	0.00E+00	1.68E-02	3.86E+00	3
190	16.032	16.870	4	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.81E-02	1.10E+01	4
191	16.288	16.648	4	4.15E+00	0.00E+00	4.15E+00	4.15E+00	0.00E+00	1.82E-02	4.17E+00	3
192	16.005	16.725	4	9.10E+00	0.00E+00	9.10E+00	9.10E+00	0.00E+00	3.98E-02	9.14E+00	4
193	16.112	16.912	4	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.08E-02	1.17E+01	4
194	16.252	16.789	4	6.71E+00	0.00E+00	6.71E+00	6.71E+00	0.00E+00	2.94E-02	6.74E+00	4
203	15.677	18.330	1	1.72E+01	0.00E+00	1.72E+01	1.72E+01	0.00E+00	7.53E-02	1.73E+01	5
204	16.461	18.591	1	8.74E-01	0.00E+00	8.74E-01	8.74E-01	0.00E+00	3.82E-03	8.78E-01	2
209	16.134	16.486	1	5.73E+00	0.00E+00	5.73E+00	5.73E+00	0.00E+00	2.51E-02	5.76E+00	3
215	16.269	18.118	2	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.49E-02	1.95E+01	5
220	15.484	18.048	3	5.43E-01	0.00E+00	5.43E-01	5.43E-01	0.00E+00	2.38E-03	5.45E-01	2
221	16.393	18.433	10	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.73E-02	6.28E+00	4
222	16.447	18.213	2	2.14E+00	0.00E+00	2.14E+00	2.14E+00	0.00E+00	9.36E-03	2.15E+00	2
223	16.300	18.359	2	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.44E-02	1.94E+01	5
226	16.382	18.616	1	7.54E+00	0.00E+00	7.54E+00	7.54E+00	0.00E+00	3.30E-02	7.57E+00	4
238	15.612	17.946	2	7.11E+00	0.00E+00	7.11E+00	7.11E+00	0.00E+00	3.11E-02	7.14E+00	4

Case 2: Protected 12 rounds at aimpoint (15.50, 18.40)

6	16.013	17.002	2	0.00E+00	0.00E+00	0.00E+00	6.76E-01	0.00E+00	2.96E-03	2.96E-03	1
15	15.135	17.274	2	0.00E+00	0.00E+00	0.00E+00	5.54E-01	0.00E+00	2.42E-03	2.42E-03	1
17	15.252	17.386	4	0.00E+00	0.00E+00	0.00E+00	1.45E+01	0.00E+00	6.34E-02	6.34E-02	1
18	15.173	17.315	9	0.00E+00	0.00E+00	0.00E+00	2.17E+00	0.00E+00	9.49E-03	9.49E-03	1
20	15.732	18.428	7	1.56E+01	0.00E+00	1.56E+01	2.76E+01	0.00E+00	1.21E-01	1.57E+01	5
23	15.640	18.125	6	2.37E+00	0.00E+00	2.37E+00	1.55E+02	0.00E+00	6.78E-01	3.05E+00	3
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	1.55E+02	0.00E+00	6.78E-01	6.78E-01	2
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	1.50E+02	0.00E+00	6.56E-01	6.56E-01	2
27	15.405	18.172	4	4.81E+00	0.00E+00	4.81E+00	1.46E+02	0.00E+00	6.39E-01	5.45E+00	3

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	1.66E+02	0.00E+00	7.26E-01	7.26E-01	2
29	15.452	18.232	4	9.99E+01	0.00E+00	9.99E+01	1.67E+02	0.00E+00	7.31E-01	1.01E+02	8
30	15.476	18.303	5	8.91E+01	0.00E+00	8.91E+01	1.50E+02	0.00E+00	6.56E-01	8.98E+01	8
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	1.64E+02	0.00E+00	7.18E-01	7.18E-01	2
32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	1.63E+02	0.00E+00	7.13E-01	7.13E-01	2
72	15.153	17.386	2	0.00E+00	0.00E+00	0.00E+00	5.80E-01	0.00E+00	2.54E-03	2.54E-03	1
94	15.517	18.257	1	5.03E+01	0.00E+00	5.03E+01	1.47E+02	0.00E+00	6.43E-01	5.09E+01	7
95	15.626	18.194	33	4.27E+01	0.00E+00	4.27E+01	1.45E+02	0.00E+00	6.34E-01	4.33E+01	6
96	15.529	18.169	7	2.31E+01	0.00E+00	2.31E+01	1.46E+02	0.00E+00	6.39E-01	2.37E+01	5
97	15.607	18.398	28	8.07E+01	0.00E+00	8.07E+01	1.45E+02	0.00E+00	6.34E-01	8.13E+01	8
98	15.562	18.363	5	2.54E+01	0.00E+00	2.54E+01	4.25E+01	0.00E+00	1.86E-01	2.56E+01	5
130	15.248	17.308	16	0.00E+00	0.00E+00	0.00E+00	1.31E+01	0.00E+00	5.73E-02	5.73E-02	1
133	15.733	18.328	9	6.43E+01	0.00E+00	6.43E+01	1.07E+02	0.00E+00	4.68E-01	6.48E+01	7
134	15.206	17.396	10	0.00E+00	0.00E+00	0.00E+00	4.62E+00	0.00E+00	2.02E-02	2.02E-02	1
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	1.72E+02	0.00E+00	7.53E-01	7.53E-01	2
138	15.585	18.218	2	3.17E+01	0.00E+00	3.17E+01	1.43E+02	0.00E+00	6.26E-01	3.23E+01	6
140	15.641	18.402	24	1.63E+01	0.00E+00	1.63E+01	2.95E+01	0.00E+00	1.29E-01	1.64E+01	5
141	15.601	18.327	10	1.00E+02	0.00E+00	1.00E+02	1.60E+02	0.00E+00	7.00E-01	1.01E+02	8
143	15.719	18.229	16	4.10E+01	0.00E+00	4.10E+01	1.45E+02	0.00E+00	6.34E-01	4.16E+01	6
144	15.555	18.123	4	3.06E+00	0.00E+00	3.06E+00	1.57E+02	0.00E+00	6.87E-01	3.75E+00	3
190	16.032	16.870	4	0.00E+00	0.00E+00	0.00E+00	1.54E-02	0.00E+00	6.74E-05	6.74E-05	1
203	15.677	18.330	1	7.34E+01	0.00E+00	7.34E+01	1.21E+02	0.00E+00	5.29E-01	7.39E+01	7
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	154.5846	0.00E+00	6.76E-01	6.76E-01	2
227	15.113	17.328	1	0.00E+00	0.00E+00	0.00E+00	0.166954	0.00E+00	7.30E-04	7.30E-04	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	137.3145	0.00E+00	6.01E-01	6.01E-01	2

Sarin (GB) 250kg Bomb
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				24 rounds at aimpont (15.90, 19.60)							
1	16.058	16.697	2	3.70E+01	0.00E+00	3.70E+01	3.70E+01	0.00E+00	1.62E-01	3.72E+01	6
2	16.495	18.182	2	2.11E-01	0.00E+00	2.11E-01	2.11E-01	0.00E+00	9.23E-04	2.12E-01	1
3	16.398	18.288	5	7.07E+00	0.00E+00	7.07E+00	7.07E+00	0.00E+00	3.09E-02	7.10E+00	4
6	16.013	17.002	2	4.52E+01	0.00E+00	4.52E+01	4.52E+01	0.00E+00	1.98E-01	4.54E+01	6
11	16.118	16.767	2	3.57E+01	0.00E+00	3.57E+01	3.57E+01	0.00E+00	1.56E-01	3.59E+01	6
16	16.187	16.658	4	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.25E-01	2.87E+01	5
19	16.065	16.500	4	3.29E+01	0.00E+00	3.29E+01	3.29E+01	0.00E+00	1.44E-01	3.30E+01	6
20	15.732	18.428	7	8.47E+01	0.00E+00	8.47E+01	8.47E+01	0.00E+00	3.71E-01	8.51E+01	8
21	16.357	16.781	7	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	5.99E-02	1.38E+01	4
22	16.263	17.082	8	2.79E+01	0.00E+00	2.79E+01	2.79E+01	0.00E+00	1.22E-01	2.80E+01	5
23	15.640	18.125	6	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
24	15.675	18.447	4	4.48E+01	0.00E+00	4.48E+01	4.48E+01	0.00E+00	1.96E-01	4.50E+01	6
25	15.684	18.075	1	3.97E+01	0.00E+00	3.97E+01	3.97E+01	0.00E+00	1.74E-01	3.99E+01	6
29	15.452	18.232	4	1.52E-02	0.00E+00	1.52E-02	1.52E-02	0.00E+00	6.65E-05	1.53E-02	1
30	15.476	18.303	5	1.37E-01	0.00E+00	1.37E-01	1.37E-01	0.00E+00	5.99E-04	1.38E-01	1
31	15.526	18.028	4	2.90E+00	0.00E+00	2.90E+00	2.90E+00	0.00E+00	1.27E-02	2.91E+00	2
48	15.950	15.453	6	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.31E-02	1.68E+01	5
50	15.975	14.694	3	5.49E+00	0.00E+00	5.49E+00	5.49E+00	0.00E+00	2.40E-02	5.51E+00	3
51	15.970	15.328	6	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.39E-02	1.47E+01	4
52	15.803	14.834	2	6.37E+00	0.00E+00	6.37E+00	6.37E+00	0.00E+00	2.79E-02	6.40E+00	4
53	15.716	14.523	2	1.75E+00	0.00E+00	1.75E+00	1.75E+00	0.00E+00	7.66E-03	1.76E+00	2
54	15.841	14.686	3	5.01E+00	0.00E+00	5.01E+00	5.01E+00	0.00E+00	2.19E-02	5.03E+00	3
55	15.746	15.374	2	9.63E+00	0.00E+00	9.63E+00	9.63E+00	0.00E+00	4.21E-02	9.67E+00	4
56	16.489	14.995	2	2.35E-01	0.00E+00	2.35E-01	2.35E-01	0.00E+00	1.03E-03	2.36E-01	1
57	15.907	15.517	2	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.44E-02	1.71E+01	5
58	15.921	14.547	3	3.33E+00	0.00E+00	3.33E+00	3.33E+00	0.00E+00	1.46E-02	3.34E+00	3
59	16.339	14.858	3	2.70E+00	0.00E+00	2.70E+00	2.70E+00	0.00E+00	1.18E-02	2.71E+00	2
60	16.396	14.734	3	8.71E-01	0.00E+00	8.71E-01	8.71E-01	0.00E+00	3.81E-03	8.75E-01	2
61	16.479	14.715	3	1.14E-01	0.00E+00	1.14E-01	1.14E-01	0.00E+00	4.99E-04	1.14E-01	1
62	16.143	14.987	4	9.10E+00	0.00E+00	9.10E+00	9.10E+00	0.00E+00	3.98E-02	9.14E+00	4
63	16.376	15.063	2	2.83E+00	0.00E+00	2.83E+00	2.83E+00	0.00E+00	1.24E-02	2.84E+00	2
77	16.101	16.650	2	3.43E+01	0.00E+00	3.43E+01	3.43E+01	0.00E+00	1.50E-01	3.45E+01	6

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

83	15.850	15.349	2	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
84	15.751	14.664	3	3.67E+00	0.00E+00	3.67E+00	3.67E+00	0.00E+00	1.61E-02	3.69E+00	3
85	15.813	15.577	2	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.48E-02	1.49E+01	4
89	16.009	18.852	4	2.09E+02	0.00E+00	2.09E+02	2.09E+02	0.00E+00	9.14E-01	2.10E+02	8
90	15.914	18.998	4	2.62E+02	0.00E+00	2.62E+02	2.62E+02	0.00E+00	1.15E+00	2.63E+02	8
91	15.692	19.420	4	4.18E+02	0.00E+00	4.18E+02	4.18E+02	0.00E+00	1.83E+00	4.20E+02	8
93	16.187	16.809	7	3.13E+01	0.00E+00	3.13E+01	3.13E+01	0.00E+00	1.37E-01	3.14E+01	6
94	15.517	18.257	1	1.14E+00	0.00E+00	1.14E+00	1.14E+00	0.00E+00	4.99E-03	1.14E+00	2
95	15.626	18.194	33	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.36E-02	1.92E+01	5
96	15.529	18.169	7	2.22E+00	0.00E+00	2.22E+00	2.22E+00	0.00E+00	9.71E-03	2.23E+00	2
97	15.607	18.398	28	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.68E-02	1.07E+01	4
98	15.562	18.363	5	3.52E+00	0.00E+00	3.52E+00	3.52E+00	0.00E+00	1.54E-02	3.54E+00	3
99	16.079	16.804	3	3.85E+01	0.00E+00	3.85E+01	3.85E+01	0.00E+00	1.68E-01	3.87E+01	6
100	16.436	18.381	3	1.75E+00	0.00E+00	1.75E+00	1.75E+00	0.00E+00	7.66E-03	1.76E+00	2
101	16.286	18.545	1	7.75E+01	0.00E+00	7.75E+01	7.75E+01	0.00E+00	3.39E-01	7.78E+01	8
103	16.329	18.484	2	3.65E+01	0.00E+00	3.65E+01	3.65E+01	0.00E+00	1.60E-01	3.67E+01	6
104	16.470	18.045	6	1.84E+00	0.00E+00	1.84E+00	1.84E+00	0.00E+00	8.05E-03	1.85E+00	2
105	16.350	18.091	1	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.80E-02	2.25E+01	5
106	16.332	18.240	1	3.09E+01	0.00E+00	3.09E+01	3.09E+01	0.00E+00	1.35E-01	3.10E+01	6
107	16.493	18.354	6	7.79E-02	0.00E+00	7.79E-02	7.79E-02	0.00E+00	3.41E-04	7.82E-02	1
108	16.408	18.056	12	8.27E+00	0.00E+00	8.27E+00	8.27E+00	0.00E+00	3.62E-02	8.31E+00	4
112	16.100	17.033	3	4.29E+01	0.00E+00	4.29E+01	4.29E+01	0.00E+00	1.88E-01	4.31E+01	6
121	16.226	16.924	3	2.95E+01	0.00E+00	2.95E+01	2.95E+01	0.00E+00	1.29E-01	2.96E+01	5
129	16.188	16.473	40	2.57E+01	0.00E+00	2.57E+01	2.57E+01	0.00E+00	1.12E-01	2.58E+01	5
131	16.175	16.676	2	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.31E-01	3.00E+01	6
132	16.015	16.530	5	3.49E+01	0.00E+00	3.49E+01	3.49E+01	0.00E+00	1.53E-01	3.51E+01	6
133	15.733	18.328	9	7.49E+01	0.00E+00	7.49E+01	7.49E+01	0.00E+00	3.28E-01	7.52E+01	8
135	16.324	16.829	12	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.61E-02	1.75E+01	5
136	16.374	16.990	4	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.82E-02	1.34E+01	4
137	15.561	17.979	6	6.63E+00	0.00E+00	6.63E+00	6.63E+00	0.00E+00	2.90E-02	6.66E+00	4
138	15.585	18.218	2	8.33E+00	0.00E+00	8.33E+00	8.33E+00	0.00E+00	3.64E-02	8.37E+00	4
140	15.641	18.402	24	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.02E-01	2.35E+01	5
141	15.601	18.327	10	9.59E+00	0.00E+00	9.59E+00	9.59E+00	0.00E+00	4.20E-02	9.63E+00	4
143	15.719	18.229	16	6.04E+01	0.00E+00	6.04E+01	6.04E+01	0.00E+00	2.64E-01	6.07E+01	7
144	15.555	18.123	4	4.51E+00	0.00E+00	4.51E+00	4.51E+00	0.00E+00	1.97E-02	4.53E+00	3
154	15.921	15.357	16	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.43E-02	1.48E+01	4
160	15.588	14.773	2	1.04E+00	0.00E+00	1.04E+00	1.04E+00	0.00E+00	4.55E-03	1.04E+00	2
161	16.283	14.887	12	4.50E+00	0.00E+00	4.50E+00	4.50E+00	0.00E+00	1.97E-02	4.52E+00	3
162	15.618	14.622	2	8.77E-01	0.00E+00	8.77E-01	8.77E-01	0.00E+00	3.84E-03	8.81E-01	2
163	15.853	14.526	3	3.00E+00	0.00E+00	3.00E+00	3.00E+00	0.00E+00	1.31E-02	3.01E+00	3
164	15.667	14.794	3	2.76E+00	0.00E+00	2.76E+00	2.76E+00	0.00E+00	1.21E-02	2.77E+00	2
165	15.824	14.794	3	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.73E-02	6.28E+00	4
166	16.178	15.100	4	9.23E+00	0.00E+00	9.23E+00	9.23E+00	0.00E+00	4.04E-02	9.27E+00	4
167	15.684	15.464	2	7.98E+00	0.00E+00	7.98E+00	7.98E+00	0.00E+00	3.49E-02	8.01E+00	4
168	15.780	15.281	2	9.99E+00	0.00E+00	9.99E+00	9.99E+00	0.00E+00	4.37E-02	1.00E+01	4
169	15.735	15.486	2	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.59E-02	1.05E+01	4
170	16.241	14.979	9	6.54E+00	0.00E+00	6.54E+00	6.54E+00	0.00E+00	2.86E-02	6.57E+00	4
171	16.233	15.088	4	7.49E+00	0.00E+00	7.49E+00	7.49E+00	0.00E+00	3.28E-02	7.52E+00	4
172	16.219	14.747	1	4.75E+00	0.00E+00	4.75E+00	4.75E+00	0.00E+00	2.08E-02	4.77E+00	3
173	16.407	14.834	1	1.06E+00	0.00E+00	1.06E+00	1.06E+00	0.00E+00	4.64E-03	1.06E+00	2
174	16.174	14.734	1	5.43E+00	0.00E+00	5.43E+00	5.43E+00	0.00E+00	2.38E-02	5.45E+00	3
175	16.414	15.004	1	1.54E+00	0.00E+00	1.54E+00	1.54E+00	0.00E+00	6.74E-03	1.55E+00	2
176	16.349	14.675	1	1.38E+00	0.00E+00	1.38E+00	1.38E+00	0.00E+00	6.04E-03	1.39E+00	2
177	16.471	14.830	1	2.28E-01	0.00E+00	2.28E-01	2.28E-01	0.00E+00	9.98E-04	2.29E-01	1
178	16.157	14.868	1	7.31E+00	0.00E+00	7.31E+00	7.31E+00	0.00E+00	3.20E-02	7.34E+00	4
185	16.181	17.037	4	3.65E+01	0.00E+00	3.65E+01	3.65E+01	0.00E+00	1.60E-01	3.67E+01	6
186	16.296	16.955	4	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.58E-02	2.20E+01	5
187	16.163	16.951	4	3.63E+01	0.00E+00	3.63E+01	3.63E+01	0.00E+00	1.59E-01	3.65E+01	6
189	16.264	16.500	4	2.00E+01	0.00E+00	2.00E+01	2.00E+01	0.00E+00	8.75E-02	2.01E+01	5
190	16.032	16.870	4	4.17E+01	0.00E+00	4.17E+01	4.17E+01	0.00E+00	1.82E-01	4.19E+01	6
191	16.288	16.648	4	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.49E-02	1.95E+01	5
192	16.005	16.725	4	3.93E+01	0.00E+00	3.93E+01	3.93E+01	0.00E+00	1.72E-01	3.95E+01	6
193	16.112	16.912	4	3.92E+01	0.00E+00	3.92E+01	3.92E+01	0.00E+00	1.72E-01	3.94E+01	6
194	16.252	16.789	4	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
197	15.916	14.875	6	8.19E+00	0.00E+00	8.19E+00	8.19E+00	0.00E+00	3.58E-02	8.23E+00	4
199	15.987	14.868	2	8.04E+00	0.00E+00	8.04E+00	8.04E+00	0.00E+00	3.52E-02	8.08E+00	4
201	15.916	14.708	2	5.73E+00	0.00E+00	5.73E+00	5.73E+00	0.00E+00	2.51E-02	5.76E+00	3
202	16.294	14.763	6	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.42E-02	3.26E+00	3

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

203	15.677	18.330	1	4.26E+01	0.00E+00	4.26E+01	4.26E+01	0.00E+00	1.86E-01	4.28E+01	6
209	16.134	16.486	1	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.28E-01	2.94E+01	5
212	16.315	15.061	2	4.71E+00	0.00E+00	4.71E+00	4.71E+00	0.00E+00	2.06E-02	4.73E+00	3
213	16.228	14.881	2	5.87E+00	0.00E+00	5.87E+00	5.87E+00	0.00E+00	2.57E-02	5.90E+00	3
214	15.841	15.478	1	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.34E-02	1.46E+01	4
215	16.269	18.118	2	5.54E+01	0.00E+00	5.54E+01	5.54E+01	0.00E+00	2.42E-01	5.56E+01	7
220	15.484	18.048	3	7.46E-01	0.00E+00	7.46E-01	7.46E-01	0.00E+00	3.26E-03	7.49E-01	2
221	16.393	18.433	10	6.35E+00	0.00E+00	6.35E+00	6.35E+00	0.00E+00	2.78E-02	6.38E+00	4
222	16.447	18.213	2	1.89E+00	0.00E+00	1.89E+00	1.89E+00	0.00E+00	8.27E-03	1.90E+00	2
223	16.300	18.359	2	5.18E+01	0.00E+00	5.18E+01	5.18E+01	0.00E+00	2.27E-01	5.20E+01	7
226	16.382	18.616	1	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.79E-02	6.41E+00	4
228	15.701	15.607	2	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.38E-02	1.00E+01	4
232	15.630	14.497	6	5.12E-01	0.00E+00	5.12E-01	5.12E-01	0.00E+00	2.24E-03	5.14E-01	2
233	15.692	14.599	3	2.05E+00	0.00E+00	2.05E+00	2.05E+00	0.00E+00	8.97E-03	2.06E+00	2
234	15.772	14.883	8	6.17E+00	0.00E+00	6.17E+00	6.17E+00	0.00E+00	2.70E-02	6.20E+00	4
236	15.710	14.733	7	3.38E+00	0.00E+00	3.38E+00	3.38E+00	0.00E+00	1.48E-02	3.39E+00	3
237	15.776	14.522	2	2.48E+00	0.00E+00	2.48E+00	2.48E+00	0.00E+00	1.09E-02	2.49E+00	2
238	15.612	17.946	2	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.13E-02	1.64E+01	5

Case 2: Protected 24 rounds at aimpoint (15.80, 16.90)

1	16.058	16.697	2	8.83E+01	0.00E+00	8.83E+01	1.75E+02	0.00E+00	7.66E-01	8.91E+01	8
11	16.118	16.767	2	7.03E+01	0.00E+00	7.03E+01	1.45E+02	0.00E+00	6.34E-01	7.09E+01	7
16	16.187	16.658	4	1.09E+01	0.00E+00	1.09E+01	4.00E+01	0.00E+00	1.75E-01	1.11E+01	4
19	16.065	16.5	4	6.31E+01	0.00E+00	6.31E+01	3.11E+02	0.00E+00	1.36E+00	6.45E+01	7
48	15.95	15.453	6	0.00E+00	0.00E+00	0.00E+00	6.29E+01	0.00E+00	2.75E-01	2.75E-01	2
51	15.97	15.328	6	0.00E+00	0.00E+00	0.00E+00	3.55E+01	0.00E+00	1.55E-01	1.55E-01	1
55	15.746	15.374	2	0.00E+00	0.00E+00	0.00E+00	4.45E+01	0.00E+00	1.95E-01	1.95E-01	1
57	15.907	15.517	2	0.00E+00	0.00E+00	0.00E+00	7.62E+01	0.00E+00	3.33E-01	3.33E-01	2
62	16.143	14.987	4	0.00E+00	0.00E+00	0.00E+00	3.34E-01	0.00E+00	1.46E-03	1.46E-03	1
63	16.376	15.063	2	0.00E+00	0.00E+00	0.00E+00	2.96E-02	0.00E+00	1.30E-04	1.30E-04	1
77	16.101	16.65	2	1.10E+02	0.00E+00	1.10E+02	3.01E+02	0.00E+00	1.32E+00	1.11E+02	8
83	15.85	15.349	2	0.00E+00	0.00E+00	0.00E+00	4.02E+01	0.00E+00	1.76E-01	1.76E-01	1
85	15.813	15.577	2	0.00E+00	0.00E+00	0.00E+00	8.73E+01	0.00E+00	3.82E-01	3.82E-01	2
93	16.187	16.809	7	1.60E+01	0.00E+00	1.60E+01	2.48E+01	0.00E+00	1.09E-01	1.61E+01	5
99	16.079	16.804	3	9.04E+01	0.00E+00	9.04E+01	1.42E+02	0.00E+00	6.21E-01	9.10E+01	8
129	16.188	16.473	40	1.43E+01	0.00E+00	1.43E+01	1.00E+02	0.00E+00	4.38E-01	1.47E+01	4
131	16.175	16.676	2	3.12E+01	0.00E+00	3.12E+01	7.69E+01	0.00E+00	3.36E-01	3.15E+01	6
132	16.015	16.53	5	4.78E+01	0.00E+00	4.78E+01	2.86E+02	0.00E+00	1.25E+00	4.91E+01	6
154	15.921	15.357	16	0.00E+00	0.00E+00	0.00E+00	4.19E+01	0.00E+00	1.83E-01	1.83E-01	1
166	16.178	15.1	4	0.00E+00	0.00E+00	0.00E+00	2.31E+00	0.00E+00	1.01E-02	1.01E-02	1
167	15.684	15.464	2	0.00E+00	0.00E+00	0.00E+00	5.68E+01	0.00E+00	2.49E-01	2.49E-01	1
168	15.78	15.281	2	0.00E+00	0.00E+00	0.00E+00	2.63E+01	0.00E+00	1.15E-01	1.15E-01	1
169	15.735	15.486	2	0.00E+00	0.00E+00	0.00E+00	6.78E+01	0.00E+00	2.97E-01	2.97E-01	2
170	16.241	14.979	9	0.00E+00	0.00E+00	0.00E+00	1.18E-01	0.00E+00	5.16E-04	5.16E-04	1
171	16.233	15.088	4	0.00E+00	0.00E+00	0.00E+00	1.19E+00	0.00E+00	5.21E-03	5.21E-03	1
190	16.032	16.87	4	3.74E+01	0.00E+00	3.74E+01	5.59E+01	0.00E+00	2.45E-01	3.76E+01	6
192	16.005	16.725	4	6.95E+01	0.00E+00	6.95E+01	1.99E+02	0.00E+00	8.71E-01	7.04E+01	7
193	16.112	16.912	4	5.56E+01	0.00E+00	5.56E+01	7.92E+01	0.00E+00	3.47E-01	5.59E+01	7
209	16.134	16.486	1	5.01E+01	0.00E+00	5.01E+01	3.04E+02	0.00E+00	1.33E+00	5.14E+01	7
212	16.315	15.061	2	0.00E+00	0.00E+00	0.00E+00	1.79E-01	0.00E+00	7.83E-04	7.83E-04	1
214	15.841	15.478	1	0.00E+00	0.00E+00	0.00E+00	6.84E+01	0.00E+00	2.99E-01	2.99E-01	2
228	15.701	15.607	2	0.00E+00	0.00E+00	0.00E+00	8.69E+01	0.00E+00	3.80E-01	3.80E-01	2

Sarin (GB) 250kg TBM
Light Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 1 round at aimpoint (15.50, 20.00)											
20	15.732	18.428	7	8.85E+00	0.00E+00	8.85E+00	8.85E+00	0.00E+00	3.87E-02	8.89E+00	4
23	15.64	18.125	6	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.23E-02	1.89E+01	5
24	15.675	18.447	4	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.14E-02	1.87E+01	5
25	15.684	18.075	1	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.95E-02	1.37E+01	4
26	15.384	17.995	5	6.19E+00	0.00E+00	6.19E+00	6.19E+00	0.00E+00	2.71E-02	6.22E+00	4
27	15.405	18.172	4	8.45E+00	0.00E+00	8.45E+00	8.45E+00	0.00E+00	3.70E-02	8.49E+00	4

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

28	15.433	18.082	4	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.94E-02	1.13E+01	4
29	15.452	18.232	4	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.43E-02	1.48E+01	4
30	15.476	18.303	5	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	7.96E-02	1.83E+01	5
31	15.526	18.028	4	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.18E-02	1.88E+01	5
32	15.369	18.094	4	4.88E+00	0.00E+00	4.88E+00	4.88E+00	0.00E+00	2.14E-02	4.90E+00	3
82	15.413	19.029	3	3.10E+00	0.00E+00	3.10E+00	3.10E+00	0.00E+00	1.36E-02	3.11E+00	3
91	15.692	19.42	4	7.32E-01	0.00E+00	7.32E-01	7.32E-01	0.00E+00	3.20E-03	7.35E-01	2
92	15.441	19.341	4	9.67E-01	0.00E+00	9.67E-01	9.67E-01	0.00E+00	4.23E-03	9.71E-01	2
94	15.517	18.257	1	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.71E-02	2.23E+01	5
95	15.626	18.194	33	2.11E+01	0.00E+00	2.11E+01	2.11E+01	0.00E+00	9.23E-02	2.12E+01	5
96	15.529	18.169	7	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.45E-02	2.17E+01	5
97	15.607	18.398	28	2.79E+01	0.00E+00	2.79E+01	2.79E+01	0.00E+00	1.22E-01	2.80E+01	5
98	15.562	18.363	5	4.78E+01	0.00E+00	4.78E+01	4.78E+01	0.00E+00	2.09E-01	4.80E+01	6
133	15.733	18.328	9	8.60E+00	0.00E+00	8.60E+00	8.60E+00	0.00E+00	3.76E-02	8.64E+00	4
137	15.561	17.979	6	3.03E+01	0.00E+00	3.03E+01	3.03E+01	0.00E+00	1.33E-01	3.04E+01	6
138	15.585	18.218	2	4.56E+01	0.00E+00	4.56E+01	4.56E+01	0.00E+00	2.00E-01	4.58E+01	6
139	15.506	19.036	2	7.51E+01	0.00E+00	7.51E+01	7.51E+01	0.00E+00	3.29E-01	7.54E+01	8
140	15.641	18.402	24	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.05E-01	2.41E+01	5
141	15.601	18.327	10	2.61E+01	0.00E+00	2.61E+01	2.61E+01	0.00E+00	1.14E-01	2.62E+01	5
143	15.719	18.229	16	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.59E-02	1.05E+01	4
144	15.555	18.123	4	2.88E+01	0.00E+00	2.88E+01	2.88E+01	0.00E+00	1.26E-01	2.89E+01	5
160	15.588	14.773	2	3.66E+00	0.00E+00	3.66E+00	3.66E+00	0.00E+00	1.60E-02	3.68E+00	3
203	15.677	18.33	1	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.35E-02	1.69E+01	5
220	15.484	18.048	3	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.04E-02	1.62E+01	5
238	15.612	17.946	2	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.70E-02	1.77E+01	5

Case 2: Protected 1 round at aimpoint (15.60, 18.40)

23	15.64	18.125	6	0.00E+00	0.00E+00	0.00E+00	5.32E+02	0.00E+00	2.33E+00	2.33E+00	2
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	1.45E+03	0.00E+00	6.34E+00	6.34E+00	4
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	2.32E+01	0.00E+00	1.02E-01	1.02E-01	1
140	15.641	18.402	24	8.97E+00	0.00E+00	8.97E+00	9.14E+00	0.00E+00	4.00E-02	9.01E+00	4
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	5.98E+00	0.00E+00	2.62E-02	2.62E-02	1
203	15.677	18.33	1	8.53E+03	0.00E+00	8.53E+03	9.57E+03	0.00E+00	4.19E+01	8.57E+03	8
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	77.54526	0.00E+00	3.39E-01	3.39E-01	2

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 2 rounds at aimpoint (15.60, 20.00)

1	16.058	16.697	2	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.78E-02	1.33E+01	4
3	16.398	18.288	5	2.10E-01	0.00E+00	2.10E-01	2.10E-01	0.00E+00	9.19E-04	2.11E-01	1
6	16.013	17.002	2	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
11	16.118	16.767	2	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.08E-02	1.40E+01	4
15	15.135	17.274	2	2.50E+00	0.00E+00	2.50E+00	2.50E+00	0.00E+00	1.09E-02	2.51E+00	2
16	16.187	16.658	4	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.25E-02	1.21E+01	4
17	15.252	17.386	4	7.69E+00	0.00E+00	7.69E+00	7.69E+00	0.00E+00	3.36E-02	7.72E+00	4
18	15.173	17.315	9	4.02E+00	0.00E+00	4.02E+00	4.02E+00	0.00E+00	1.76E-02	4.04E+00	3
19	16.065	16.500	4	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.21E-02	1.20E+01	4
20	15.732	18.428	7	4.43E+00	0.00E+00	4.43E+00	4.43E+00	0.00E+00	1.94E-02	4.45E+00	3
21	16.357	16.781	7	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.50E-02	5.75E+00	3
22	16.263	17.082	8	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.94E-02	1.13E+01	4
23	15.640	18.125	6	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.17E-02	1.42E+01	4
24	15.675	18.447	4	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.46E-02	1.02E+01	4
25	15.684	18.075	1	9.60E+00	0.00E+00	9.60E+00	9.60E+00	0.00E+00	4.20E-02	9.64E+00	4
26	15.384	17.995	5	2.00E+01	0.00E+00	2.00E+01	2.00E+01	0.00E+00	8.75E-02	2.01E+01	5
27	15.405	18.172	4	2.75E+01	0.00E+00	2.75E+01	2.75E+01	0.00E+00	1.20E-01	2.76E+01	5
28	15.433	18.082	4	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
29	15.452	18.232	4	3.56E+01	0.00E+00	3.56E+01	3.56E+01	0.00E+00	1.56E-01	3.58E+01	6
30	15.476	18.303	5	3.86E+01	0.00E+00	3.86E+01	3.86E+01	0.00E+00	1.69E-01	3.88E+01	6
31	15.526	18.028	4	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
32	15.369	18.094	4	2.04E+01	0.00E+00	2.04E+01	2.04E+01	0.00E+00	8.93E-02	2.05E+01	5
48	15.950	15.453	6	6.41E+00	0.00E+00	6.41E+00	6.41E+00	0.00E+00	2.80E-02	6.44E+00	4
50	15.975	14.694	3	5.02E+00	0.00E+00	5.02E+00	5.02E+00	0.00E+00	2.20E-02	5.04E+00	3

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

51	15.970	15.328	6	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.79E-02	6.41E+00	4
52	15.803	14.834	2	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.63E-02	3.75E+00	3
53	15.716	14.523	2	2.82E+00	0.00E+00	2.82E+00	2.82E+00	0.00E+00	1.23E-02	2.83E+00	2
54	15.841	14.686	3	3.31E+00	0.00E+00	3.31E+00	3.31E+00	0.00E+00	1.45E-02	3.32E+00	3
55	15.746	15.374	2	5.23E+00	0.00E+00	5.23E+00	5.23E+00	0.00E+00	2.29E-02	5.25E+00	3
56	16.489	14.995	2	3.37E-01	0.00E+00	3.37E-01	3.37E-01	0.00E+00	1.47E-03	3.38E-01	2
57	15.907	15.517	2	5.70E+00	0.00E+00	5.70E+00	5.70E+00	0.00E+00	2.49E-02	5.72E+00	3
58	15.921	14.547	3	4.08E+00	0.00E+00	4.08E+00	4.08E+00	0.00E+00	1.79E-02	4.10E+00	3
59	16.339	14.858	3	3.67E+00	0.00E+00	3.67E+00	3.67E+00	0.00E+00	1.61E-02	3.69E+00	3
60	16.396	14.734	3	2.32E+00	0.00E+00	2.32E+00	2.32E+00	0.00E+00	1.02E-02	2.33E+00	2
61	16.479	14.715	3	3.94E-01	0.00E+00	3.94E-01	3.94E-01	0.00E+00	1.72E-03	3.96E-01	2
62	16.143	14.987	4	6.13E+00	0.00E+00	6.13E+00	6.13E+00	0.00E+00	2.68E-02	6.16E+00	4
63	16.376	15.063	2	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.47E-02	3.37E+00	3
72	15.153	17.386	2	3.17E+00	0.00E+00	3.17E+00	3.17E+00	0.00E+00	1.39E-02	3.18E+00	3
77	16.101	16.650	2	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.69E-02	1.31E+01	4
82	15.413	19.029	3	1.01E+02	0.00E+00	1.01E+02	1.01E+02	0.00E+00	4.42E-01	1.01E+02	8
83	15.850	15.349	2	4.94E+00	0.00E+00	4.94E+00	4.94E+00	0.00E+00	2.16E-02	4.96E+00	3
84	15.751	14.664	3	3.34E+00	0.00E+00	3.34E+00	3.34E+00	0.00E+00	1.46E-02	3.35E+00	3
85	15.813	15.577	2	6.07E+00	0.00E+00	6.07E+00	6.07E+00	0.00E+00	2.66E-02	6.10E+00	4
89	16.009	18.852	4	8.86E+01	0.00E+00	8.86E+01	8.86E+01	0.00E+00	3.88E-01	8.90E+01	8
90	15.914	18.998	4	1.50E+00	0.00E+00	1.50E+00	1.50E+00	0.00E+00	6.56E-03	1.51E+00	2
91	15.692	19.420	4	1.20E-01	0.00E+00	1.20E-01	1.20E-01	0.00E+00	5.25E-04	1.21E-01	1
92	15.441	19.341	4	2.34E+02	0.00E+00	2.34E+02	2.34E+02	0.00E+00	1.02E+00	2.35E+02	8
93	16.187	16.809	7	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
94	15.517	18.257	1	3.44E+01	0.00E+00	3.44E+01	3.44E+01	0.00E+00	1.51E-01	3.46E+01	6
95	15.626	18.194	33	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.04E-02	1.62E+01	5
96	15.529	18.169	7	2.96E+01	0.00E+00	2.96E+01	2.96E+01	0.00E+00	1.30E-01	2.97E+01	5
97	15.607	18.398	28	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.71E-02	2.23E+01	5
98	15.562	18.363	5	3.28E+01	0.00E+00	3.28E+01	3.28E+01	0.00E+00	1.44E-01	3.29E+01	6
99	16.079	16.804	3	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
101	16.286	18.545	1	8.86E+00	0.00E+00	8.86E+00	8.86E+00	0.00E+00	3.88E-02	8.90E+00	4
103	16.329	18.484	2	3.46E+00	0.00E+00	3.46E+00	3.46E+00	0.00E+00	1.51E-02	3.48E+00	3
105	16.350	18.091	1	4.48E+00	0.00E+00	4.48E+00	4.48E+00	0.00E+00	1.96E-02	4.50E+00	3
106	16.332	18.240	1	5.65E+00	0.00E+00	5.65E+00	5.65E+00	0.00E+00	2.47E-02	5.67E+00	3
108	16.408	18.056	12	1.13E+00	0.00E+00	1.13E+00	1.13E+00	0.00E+00	4.94E-03	1.13E+00	2
112	16.100	17.033	3	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.09E-02	1.63E+01	5
121	16.226	16.924	3	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.38E-02	1.24E+01	4
129	16.188	16.473	40	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.86E-02	1.11E+01	4
130	15.248	17.308	16	7.35E+00	0.00E+00	7.35E+00	7.35E+00	0.00E+00	3.22E-02	7.38E+00	4
131	16.175	16.676	2	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.38E-02	1.24E+01	4
132	16.015	16.530	5	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	4.99E-02	1.14E+01	4
133	15.733	18.328	9	4.64E+00	0.00E+00	4.64E+00	4.64E+00	0.00E+00	2.03E-02	4.66E+00	3
134	15.206	17.396	10	5.50E+00	0.00E+00	5.50E+00	5.50E+00	0.00E+00	2.41E-02	5.52E+00	3
135	16.324	16.829	12	7.32E+00	0.00E+00	7.32E+00	7.32E+00	0.00E+00	3.20E-02	7.35E+00	4
136	16.374	16.990	4	5.31E+00	0.00E+00	5.31E+00	5.31E+00	0.00E+00	2.32E-02	5.33E+00	3
137	15.561	17.979	6	2.04E+01	0.00E+00	2.04E+01	2.04E+01	0.00E+00	8.93E-02	2.05E+01	5
138	15.585	18.218	2	2.23E+01	0.00E+00	2.23E+01	2.23E+01	0.00E+00	9.76E-02	2.24E+01	5
139	15.506	19.036	2	1.35E+02	0.00E+00	1.35E+02	1.35E+02	0.00E+00	5.91E-01	1.36E+02	8
140	15.641	18.402	24	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.69E-02	1.54E+01	5
141	15.601	18.327	10	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.28E-02	2.13E+01	5
143	15.719	18.229	16	6.17E+00	0.00E+00	6.17E+00	6.17E+00	0.00E+00	2.70E-02	6.20E+00	4
144	15.555	18.123	4	2.49E+01	0.00E+00	2.49E+01	2.49E+01	0.00E+00	1.09E-01	2.50E+01	5
154	15.921	15.357	16	5.66E+00	0.00E+00	5.66E+00	5.66E+00	0.00E+00	2.48E-02	5.68E+00	3
160	15.588	14.773	2	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.00E-02	4.58E+00	3
161	16.283	14.887	12	4.54E+00	0.00E+00	4.54E+00	4.54E+00	0.00E+00	1.99E-02	4.56E+00	3
162	15.618	14.622	2	3.96E+00	0.00E+00	3.96E+00	3.96E+00	0.00E+00	1.73E-02	3.98E+00	3
163	15.853	14.526	3	3.10E+00	0.00E+00	3.10E+00	3.10E+00	0.00E+00	1.36E-02	3.11E+00	3
164	15.667	14.794	3	3.67E+00	0.00E+00	3.67E+00	3.67E+00	0.00E+00	1.61E-02	3.69E+00	3
165	15.824	14.794	3	3.50E+00	0.00E+00	3.50E+00	3.50E+00	0.00E+00	1.53E-02	3.52E+00	3
166	16.178	15.100	4	6.28E+00	0.00E+00	6.28E+00	6.28E+00	0.00E+00	2.75E-02	6.31E+00	4
167	15.684	15.464	2	4.78E+00	0.00E+00	4.78E+00	4.78E+00	0.00E+00	2.09E-02	4.80E+00	3
168	15.780	15.281	2	5.09E+00	0.00E+00	5.09E+00	5.09E+00	0.00E+00	2.23E-02	5.11E+00	3
169	15.735	15.486	2	5.38E+00	0.00E+00	5.38E+00	5.38E+00	0.00E+00	2.35E-02	5.40E+00	3
170	16.241	14.979	9	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.39E-02	5.49E+00	3
171	16.233	15.088	4	5.77E+00	0.00E+00	5.77E+00	5.77E+00	0.00E+00	2.52E-02	5.80E+00	3
172	16.219	14.747	1	5.15E+00	0.00E+00	5.15E+00	5.15E+00	0.00E+00	2.25E-02	5.17E+00	3
173	16.407	14.834	1	2.28E+00	0.00E+00	2.28E+00	2.28E+00	0.00E+00	9.98E-03	2.29E+00	2
174	16.174	14.734	1	5.49E+00	0.00E+00	5.49E+00	5.49E+00	0.00E+00	2.40E-02	5.51E+00	3

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

175	16.414	15.004	1	2.44E+00	0.00E+00	2.44E+00	2.44E+00	0.00E+00	1.07E-02	2.45E+00	2
176	16.349	14.675	1	3.10E+00	0.00E+00	3.10E+00	3.10E+00	0.00E+00	1.36E-02	3.11E+00	3
177	16.471	14.830	1	7.26E-01	0.00E+00	7.26E-01	7.26E-01	0.00E+00	3.18E-03	7.29E-01	2
178	16.157	14.868	1	5.83E+00	0.00E+00	5.83E+00	5.83E+00	0.00E+00	2.55E-02	5.86E+00	3
185	16.181	17.037	4	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.43E-02	1.48E+01	4
186	16.296	16.955	4	8.89E+00	0.00E+00	8.89E+00	8.89E+00	0.00E+00	3.89E-02	8.93E+00	4
187	16.163	16.951	4	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.39E-02	1.47E+01	4
189	16.264	16.500	4	9.00E+00	0.00E+00	9.00E+00	9.00E+00	0.00E+00	3.94E-02	9.04E+00	4
190	16.032	16.870	4	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.13E-02	1.41E+01	4
191	16.288	16.648	4	8.67E+00	0.00E+00	8.67E+00	8.67E+00	0.00E+00	3.79E-02	8.71E+00	4
192	16.005	16.725	4	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.43E-02	1.25E+01	4
193	16.112	16.912	4	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.61E-02	1.52E+01	5
194	16.252	16.789	4	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.51E-02	1.03E+01	4
197	15.916	14.875	6	4.60E+00	0.00E+00	4.60E+00	4.60E+00	0.00E+00	2.01E-02	4.62E+00	3
199	15.987	14.868	2	5.49E+00	0.00E+00	5.49E+00	5.49E+00	0.00E+00	2.40E-02	5.51E+00	3
201	15.916	14.708	2	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.86E-02	4.28E+00	3
202	16.294	14.763	6	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.82E-02	4.19E+00	3
203	15.677	18.330	1	9.81E+00	0.00E+00	9.81E+00	9.81E+00	0.00E+00	4.29E-02	9.85E+00	4
209	16.134	16.486	1	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.21E-02	1.20E+01	4
212	16.315	15.061	2	4.38E+00	0.00E+00	4.38E+00	4.38E+00	0.00E+00	1.92E-02	4.40E+00	3
213	16.228	14.881	2	5.34E+00	0.00E+00	5.34E+00	5.34E+00	0.00E+00	2.34E-02	5.36E+00	3
214	15.841	15.478	1	5.51E+00	0.00E+00	5.51E+00	5.51E+00	0.00E+00	2.41E-02	5.53E+00	3
215	16.269	18.118	2	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.56E-02	1.51E+01	5
220	15.484	18.048	3	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.18E-01	2.71E+01	5
221	16.393	18.433	10	2.71E-01	0.00E+00	2.71E-01	2.71E-01	0.00E+00	1.19E-03	2.72E-01	2
222	16.447	18.213	2	3.29E-02	0.00E+00	3.29E-02	3.29E-02	0.00E+00	1.44E-04	3.30E-02	1
223	16.300	18.359	2	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.55E-02	8.16E+00	4
226	16.382	18.616	1	1.88E-01	0.00E+00	1.88E-01	1.88E-01	0.00E+00	8.23E-04	1.89E-01	1
227	15.113	17.328	1	1.60E+00	0.00E+00	1.60E+00	1.60E+00	0.00E+00	7.00E-03	1.61E+00	2
228	15.701	15.607	2	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.10E-02	4.83E+00	3
232	15.630	14.497	6	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.56E-02	3.58E+00	3
233	15.692	14.599	3	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.37E-02	3.15E+00	3
234	15.772	14.883	8	3.93E+00	0.00E+00	3.93E+00	3.93E+00	0.00E+00	1.72E-02	3.95E+00	3
236	15.710	14.733	7	3.28E+00	0.00E+00	3.28E+00	3.28E+00	0.00E+00	1.44E-02	3.29E+00	3
237	15.776	14.522	2	2.64E+00	0.00E+00	2.64E+00	2.64E+00	0.00E+00	1.16E-02	2.65E+00	2
238	15.612	17.946	2	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.00E-02	1.61E+01	5
Case 2: Protected 2 rounds at aimpoint (15.70, 18.10)											
1	16.058	16.697	2	0.00E+00	0.00E+00	0.00E+00	1.80E+01	0.00E+00	7.88E-02	7.88E-02	1
6	16.013	17.002	2	0.00E+00	0.00E+00	0.00E+00	2.65E+00	0.00E+00	1.16E-02	1.16E-02	1
11	16.118	16.767	2	0.00E+00	0.00E+00	0.00E+00	7.63E+01	0.00E+00	3.34E-01	3.34E-01	2
16	16.187	16.658	4	0.00E+00	0.00E+00	0.00E+00	8.09E+01	0.00E+00	3.54E-01	3.54E-01	2
19	16.065	16.500	4	0.00E+00	0.00E+00	0.00E+00	3.01E+00	0.00E+00	1.32E-02	1.32E-02	1
21	16.357	16.781	7	0.00E+00	0.00E+00	0.00E+00	1.06E+01	0.00E+00	4.64E-02	4.64E-02	1
22	16.263	17.082	8	0.00E+00	0.00E+00	0.00E+00	1.61E+02	0.00E+00	7.04E-01	7.04E-01	2
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	2.07E+02	0.00E+00	9.06E-01	9.06E-01	2
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	4.23E-01	0.00E+00	1.85E-03	1.85E-03	1
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	4.44E+02	0.00E+00	1.94E+00	1.94E+00	2
77	16.101	16.650	2	0.00E+00	0.00E+00	0.00E+00	3.62E+01	0.00E+00	1.58E-01	1.58E-01	1
93	16.187	16.809	7	0.00E+00	0.00E+00	0.00E+00	1.51E+02	0.00E+00	6.61E-01	6.61E-01	2
94	15.517	18.257	1	3.12E-04	0.00E+00	3.12E-04	5.54E+01	0.00E+00	2.42E-01	2.43E-01	1
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	3.30E+02	0.00E+00	1.44E+00	1.44E+00	2
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	2.85E+02	0.00E+00	1.25E+00	1.25E+00	2
97	15.607	18.398	28	2.45E+00	0.00E+00	2.45E+00	4.37E+00	0.00E+00	1.91E-02	2.47E+00	2
98	15.562	18.363	5	5.91E-01	0.00E+00	5.91E-01	1.83E+01	0.00E+00	8.01E-02	6.71E-01	2
99	16.079	16.804	3	0.00E+00	0.00E+00	0.00E+00	4.07E+01	0.00E+00	1.78E-01	1.78E-01	1
112	16.100	17.033	3	0.00E+00	0.00E+00	0.00E+00	6.17E+01	0.00E+00	2.70E-01	2.70E-01	2
121	16.226	16.924	3	0.00E+00	0.00E+00	0.00E+00	1.79E+02	0.00E+00	7.83E-01	7.83E-01	2
129	16.188	16.473	40	0.00E+00	0.00E+00	0.00E+00	1.04E+01	0.00E+00	4.55E-02	4.55E-02	1
131	16.175	16.676	2	0.00E+00	0.00E+00	0.00E+00	8.63E+01	0.00E+00	3.78E-01	3.78E-01	2
132	16.015	16.530	5	0.00E+00	0.00E+00	0.00E+00	1.60E+00	0.00E+00	7.00E-03	7.00E-03	1
135	16.324	16.829	12	0.00E+00	0.00E+00	0.00E+00	3.52E+01	0.00E+00	1.54E-01	1.54E-01	1
136	16.374	16.990	4	0.00E+00	0.00E+00	0.00E+00	4.12E+00	0.00E+00	1.80E-02	1.80E-02	1
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	8.73E+02	0.00E+00	3.82E+00	3.82E+00	3
138	15.585	18.218	2	6.76E-02	0.00E+00	6.76E-02	4.77E+02	0.00E+00	2.09E+00	2.15E+00	2
140	15.641	18.402	24	5.12E-01	0.00E+00	5.12E-01	5.13E-01	0.00E+00	2.24E-03	5.14E-01	2
141	15.601	18.327	10	1.15E+00	0.00E+00	1.15E+00	8.06E+01	0.00E+00	3.53E-01	1.50E+00	2
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	7.45E+02	0.00E+00	3.26E+00	3.26E+00	3
185	16.181	17.037	4	0.00E+00	0.00E+00	0.00E+00	2.46E+02	0.00E+00	1.08E+00	1.08E+00	2

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

186	16.296	16.955	4	0.00E+00	0.00E+00	0.00E+00	6.67E+01	0.00E+00	2.92E-01	2.92E-01	2
187	16.163	16.951	4	0.00E+00	0.00E+00	0.00E+00	1.81E+02	0.00E+00	7.92E-01	7.92E-01	2
189	16.264	16.500	4	0.00E+00	0.00E+00	0.00E+00	9.62E+00	0.00E+00	4.21E-02	4.21E-02	1
190	16.032	16.870	4	0.00E+00	0.00E+00	0.00E+00	8.41E+00	0.00E+00	3.68E-02	3.68E-02	1
191	16.288	16.648	4	0.00E+00	0.00E+00	0.00E+00	4.04E+01	0.00E+00	1.77E-01	1.77E-01	1
192	16.005	16.725	4	0.00E+00	0.00E+00	0.00E+00	3.90E+00	0.00E+00	1.71E-02	1.71E-02	1
193	16.112	16.912	4	0.00E+00	0.00E+00	0.00E+00	8.60E+01	0.00E+00	3.76E-01	3.76E-01	2
194	16.252	16.789	4	0.00E+00	0.00E+00	0.00E+00	1.15E+02	0.00E+00	5.03E-01	5.03E-01	2
209	16.134	16.486	1	0.00E+00	0.00E+00	0.00E+00	8.57E+00	0.00E+00	3.75E-02	3.75E-02	1
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	6.25E-01	0.00E+00	2.73E-03	2.73E-03	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	709.4877	0.00E+00	3.10E+00	3.10E+00	3

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 4 rounds at aimpoint (15.60, 20.00)											
1	16.058	16.697	2	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.27E-01	2.91E+01	5
3	16.398	18.288	5	6.53E-01	0.00E+00	6.53E-01	6.53E-01	0.00E+00	2.86E-03	6.56E-01	2
6	16.013	17.002	2	3.67E+01	0.00E+00	3.67E+01	3.67E+01	0.00E+00	1.61E-01	3.69E+01	6
11	16.118	16.767	2	2.66E+01	0.00E+00	2.66E+01	2.66E+01	0.00E+00	1.16E-01	2.67E+01	5
15	15.135	17.274	2	2.66E+00	0.00E+00	2.66E+00	2.66E+00	0.00E+00	1.16E-02	2.67E+00	2
16	16.187	16.658	4	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.01E-02	2.07E+01	5
17	15.252	17.386	4	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.82E-02	6.47E+00	4
18	15.173	17.315	9	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.61E-02	3.70E+00	3
19	16.065	16.500	4	2.63E+01	0.00E+00	2.63E+01	2.63E+01	0.00E+00	1.15E-01	2.64E+01	5
20	15.732	18.428	7	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
21	16.357	16.781	7	7.65E+00	0.00E+00	7.65E+00	7.65E+00	0.00E+00	3.35E-02	7.68E+00	4
22	16.263	17.082	8	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.78E-02	1.56E+01	5
23	15.640	18.125	6	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.61E-02	1.75E+01	5
24	15.675	18.447	4	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	5.99E-02	1.38E+01	4
25	15.684	18.075	1	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.49E-02	1.95E+01	5
26	15.384	17.995	5	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
27	15.405	18.172	4	3.39E+01	0.00E+00	3.39E+01	3.39E+01	0.00E+00	1.48E-01	3.40E+01	6
28	15.433	18.082	4	3.22E+01	0.00E+00	3.22E+01	3.22E+01	0.00E+00	1.41E-01	3.23E+01	6
29	15.452	18.232	4	4.35E+01	0.00E+00	4.35E+01	4.35E+01	0.00E+00	1.90E-01	4.37E+01	6
30	15.476	18.303	5	4.88E+01	0.00E+00	4.88E+01	4.88E+01	0.00E+00	2.14E-01	4.90E+01	6
31	15.526	18.028	4	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
32	15.369	18.094	4	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.05E-01	2.42E+01	5
48	15.950	15.453	6	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.36E-02	1.92E+01	5
50	15.975	14.694	3	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.34E-02	1.46E+01	4
51	15.970	15.328	6	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.88E-02	1.81E+01	5
52	15.803	14.834	2	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.39E-02	1.47E+01	4
53	15.716	14.523	2	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.16E-02	1.19E+01	4
54	15.841	14.686	3	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.34E-02	1.46E+01	4
55	15.746	15.374	2	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.87E-02	1.58E+01	5
56	16.489	14.995	2	2.83E+00	0.00E+00	2.83E+00	2.83E+00	0.00E+00	1.24E-02	2.84E+00	2
57	15.907	15.517	2	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.58E-02	1.97E+01	5
58	15.921	14.547	3	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
59	16.339	14.858	3	7.26E+00	0.00E+00	7.26E+00	7.26E+00	0.00E+00	3.18E-02	7.29E+00	4
60	16.396	14.734	3	4.82E+00	0.00E+00	4.82E+00	4.82E+00	0.00E+00	2.11E-02	4.84E+00	3
61	16.479	14.715	3	2.81E+00	0.00E+00	2.81E+00	2.81E+00	0.00E+00	1.23E-02	2.82E+00	2
62	16.143	14.987	4	1.37E+01	0.00E+00	1.37E+01	1.37E+01	0.00E+00	5.99E-02	1.38E+01	4
63	16.376	15.063	2	6.06E+00	0.00E+00	6.06E+00	6.06E+00	0.00E+00	2.65E-02	6.09E+00	4
72	15.153	17.386	2	3.00E+00	0.00E+00	3.00E+00	3.00E+00	0.00E+00	1.31E-02	3.01E+00	3
77	16.101	16.650	2	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.16E-01	2.66E+01	5
82	15.413	19.029	3	9.59E+01	0.00E+00	9.59E+01	9.59E+01	0.00E+00	4.20E-01	9.63E+01	8
83	15.850	15.349	2	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.83E-02	1.80E+01	5
84	15.751	14.664	3	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
85	15.813	15.577	2	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
89	16.009	18.852	4	2.85E+02	0.00E+00	2.85E+02	2.85E+02	0.00E+00	1.25E+00	2.86E+02	8
90	15.914	18.998	4	4.32E+02	0.00E+00	4.32E+02	4.32E+02	0.00E+00	1.89E+00	4.34E+02	8
91	15.692	19.420	4	8.55E-02	0.00E+00	8.55E-02	8.55E-02	0.00E+00	3.74E-04	8.59E-02	1

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

92	15.441	19.341	4	2.21E+02	0.00E+00	2.21E+02	2.21E+02	0.00E+00	9.67E-01	2.22E+02	8
93	16.187	16.809	7	2.17E+01	0.00E+00	2.17E+01	2.17E+01	0.00E+00	9.49E-02	2.18E+01	5
94	15.517	18.257	1	4.33E+01	0.00E+00	4.33E+01	4.33E+01	0.00E+00	1.89E-01	4.35E+01	6
95	15.626	18.194	33	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.10E-02	2.09E+01	5
96	15.529	18.169	7	3.61E+01	0.00E+00	3.61E+01	3.61E+01	0.00E+00	1.58E-01	3.63E+01	6
97	15.607	18.398	28	2.75E+01	0.00E+00	2.75E+01	2.75E+01	0.00E+00	1.20E-01	2.76E+01	5
98	15.562	18.363	5	3.94E+01	0.00E+00	3.94E+01	3.94E+01	0.00E+00	1.72E-01	3.96E+01	6
99	16.079	16.804	3	2.95E+01	0.00E+00	2.95E+01	2.95E+01	0.00E+00	1.29E-01	2.96E+01	5
100	16.436	18.381	3	5.54E-02	0.00E+00	5.54E-02	5.54E-02	0.00E+00	2.42E-04	5.56E-02	1
101	16.286	18.545	1	8.76E+00	0.00E+00	8.76E+00	8.76E+00	0.00E+00	3.83E-02	8.80E+00	4
103	16.329	18.484	2	2.70E+00	0.00E+00	2.70E+00	2.70E+00	0.00E+00	1.18E-02	2.71E+00	2
104	16.470	18.045	6	1.36E-01	0.00E+00	1.36E-01	1.36E-01	0.00E+00	5.95E-04	1.37E-01	1
105	16.350	18.091	1	4.18E+00	0.00E+00	4.18E+00	4.18E+00	0.00E+00	1.83E-02	4.20E+00	3
106	16.332	18.240	1	4.62E+00	0.00E+00	4.62E+00	4.62E+00	0.00E+00	2.02E-02	4.64E+00	3
108	16.408	18.056	12	1.28E+00	0.00E+00	1.28E+00	1.28E+00	0.00E+00	5.60E-03	1.29E+00	2
112	16.100	17.033	3	3.34E+01	0.00E+00	3.34E+01	3.34E+01	0.00E+00	1.46E-01	3.35E+01	6
121	16.226	16.924	3	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.23E-02	1.89E+01	5
129	16.188	16.473	40	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.44E-02	1.94E+01	5
130	15.248	17.308	16	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.73E-02	6.26E+00	4
131	16.175	16.676	2	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.45E-02	2.17E+01	5
132	16.015	16.530	5	2.79E+01	0.00E+00	2.79E+01	2.79E+01	0.00E+00	1.22E-01	2.80E+01	5
133	15.733	18.328	9	3.25E+01	0.00E+00	3.25E+01	3.25E+01	0.00E+00	1.42E-01	3.26E+01	6
134	15.206	17.396	10	4.68E+00	0.00E+00	4.68E+00	4.68E+00	0.00E+00	2.05E-02	4.70E+00	3
135	16.324	16.829	12	9.94E+00	0.00E+00	9.94E+00	9.94E+00	0.00E+00	4.35E-02	9.98E+00	4
136	16.374	16.990	4	6.67E+00	0.00E+00	6.67E+00	6.67E+00	0.00E+00	2.92E-02	6.70E+00	4
137	15.561	17.979	6	2.43E+01	0.00E+00	2.43E+01	2.43E+01	0.00E+00	1.06E-01	2.44E+01	5
138	15.585	18.218	2	2.92E+01	0.00E+00	2.92E+01	2.92E+01	0.00E+00	1.28E-01	2.93E+01	5
139	15.506	19.036	2	1.29E+02	0.00E+00	1.29E+02	1.29E+02	0.00E+00	5.64E-01	1.30E+02	8
140	15.641	18.402	24	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	7.96E-02	1.83E+01	5
141	15.601	18.327	10	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.25E-01	2.87E+01	5
143	15.719	18.229	16	2.73E+01	0.00E+00	2.73E+01	2.73E+01	0.00E+00	1.19E-01	2.74E+01	5
144	15.555	18.123	4	3.05E+01	0.00E+00	3.05E+01	3.05E+01	0.00E+00	1.33E-01	3.06E+01	6
154	15.921	15.357	16	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
160	15.588	14.773	2	9.19E+00	0.00E+00	9.19E+00	9.19E+00	0.00E+00	4.02E-02	9.23E+00	4
161	16.283	14.887	12	9.20E+00	0.00E+00	9.20E+00	9.20E+00	0.00E+00	4.03E-02	9.24E+00	4
162	15.618	14.622	2	9.62E+00	0.00E+00	9.62E+00	9.62E+00	0.00E+00	4.21E-02	9.66E+00	4
163	15.853	14.526	3	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.08E-02	1.40E+01	4
164	15.667	14.794	3	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.03E-02	1.16E+01	4
165	15.824	14.794	3	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.48E-02	1.49E+01	4
166	16.178	15.100	4	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.73E-02	1.32E+01	4
167	15.684	15.464	2	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.13E-02	1.41E+01	4
168	15.780	15.281	2	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.04E-02	1.62E+01	5
169	15.735	15.486	2	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.87E-02	1.58E+01	5
170	16.241	14.979	9	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.77E-02	1.09E+01	4
171	16.233	15.088	4	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	4.99E-02	1.14E+01	4
172	16.219	14.747	1	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.73E-02	1.08E+01	4
173	16.407	14.834	1	4.59E+00	0.00E+00	4.59E+00	4.59E+00	0.00E+00	2.01E-02	4.61E+00	3
174	16.174	14.734	1	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.25E-02	1.21E+01	4
175	16.414	15.004	1	4.57E+00	0.00E+00	4.57E+00	4.57E+00	0.00E+00	2.00E-02	4.59E+00	3
176	16.349	14.675	1	6.54E+00	0.00E+00	6.54E+00	6.54E+00	0.00E+00	2.86E-02	6.57E+00	4
177	16.471	14.830	1	3.09E+00	0.00E+00	3.09E+00	3.09E+00	0.00E+00	1.35E-02	3.10E+00	3
178	16.157	14.868	1	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.64E-02	1.30E+01	4
185	16.181	17.037	4	2.47E+01	0.00E+00	2.47E+01	2.47E+01	0.00E+00	1.08E-01	2.48E+01	5
186	16.296	16.955	4	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.34E-02	1.23E+01	4
187	16.163	16.951	4	2.56E+01	0.00E+00	2.56E+01	2.56E+01	0.00E+00	1.12E-01	2.57E+01	5
189	16.264	16.500	4	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.13E-02	1.41E+01	4
190	16.032	16.870	4	3.30E+01	0.00E+00	3.30E+01	3.30E+01	0.00E+00	1.44E-01	3.31E+01	6
191	16.288	16.648	4	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.56E-02	1.28E+01	4
192	16.005	16.725	4	3.09E+01	0.00E+00	3.09E+01	3.09E+01	0.00E+00	1.35E-01	3.10E+01	6
193	16.112	16.912	4	2.95E+01	0.00E+00	2.95E+01	2.95E+01	0.00E+00	1.29E-01	2.96E+01	5
194	16.252	16.789	4	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	6.96E-02	1.60E+01	5
197	15.916	14.875	6	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	6.96E-02	1.60E+01	5
199	15.987	14.868	2	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.69E-02	1.54E+01	5
201	15.916	14.708	2	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.61E-02	1.52E+01	5
202	16.294	14.763	6	8.54E+00	0.00E+00	8.54E+00	8.54E+00	0.00E+00	3.74E-02	8.58E+00	4
203	15.677	18.330	1	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.04E-02	1.62E+01	5
209	16.134	16.486	1	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	9.98E-02	2.29E+01	5
212	16.315	15.061	2	8.46E+00	0.00E+00	8.46E+00	8.46E+00	0.00E+00	3.70E-02	8.50E+00	4

Table E3
GB Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

213	16.228	14.881	2	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.77E-02	1.09E+01	4
214	15.841	15.478	1	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
215	16.269	18.118	2	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.79E-02	2.02E+01	5
220	15.484	18.048	3	3.24E+01	0.00E+00	3.24E+01	3.24E+01	0.00E+00	1.42E-01	3.25E+01	6
221	16.393	18.433	10	2.84E-01	0.00E+00	2.84E-01	2.84E-01	0.00E+00	1.24E-03	2.85E-01	2
222	16.447	18.213	2	5.20E-02	0.00E+00	5.20E-02	5.20E-02	0.00E+00	2.28E-04	5.22E-02	1
223	16.300	18.359	2	6.50E+00	0.00E+00	6.50E+00	6.50E+00	0.00E+00	2.84E-02	6.53E+00	4
226	16.382	18.616	1	1.94E-01	0.00E+00	1.94E-01	1.94E-01	0.00E+00	8.49E-04	1.95E-01	1
227	15.113	17.328	1	2.08E+00	0.00E+00	2.08E+00	2.08E+00	0.00E+00	9.10E-03	2.09E+00	2
228	15.701	15.607	2	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.65E-02	1.53E+01	5
232	15.630	14.497	6	9.67E+00	0.00E+00	9.67E+00	9.67E+00	0.00E+00	4.23E-02	9.71E+00	4
233	15.692	14.599	3	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.03E-02	1.16E+01	4
234	15.772	14.883	8	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.26E-02	1.44E+01	4
236	15.710	14.733	7	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.43E-02	1.25E+01	4
237	15.776	14.522	2	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.64E-02	1.30E+01	4
238	15.612	17.946	2	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.09E-02	1.86E+01	5
Case 2: Protected 4 rounds at aimpoint (15.20, 18.60)											
6	16.013	17.002	2	0.00E+00	0.00E+00	0.00E+00	8.03E-02	0.00E+00	3.51E-04	3.51E-04	1
15	15.135	17.274	2	0.00E+00	0.00E+00	0.00E+00	3.49E+01	0.00E+00	1.53E-01	1.53E-01	1
17	15.252	17.386	4	0.00E+00	0.00E+00	0.00E+00	9.26E+00	0.00E+00	4.05E-02	4.05E-02	1
18	15.173	17.315	9	0.00E+00	0.00E+00	0.00E+00	3.16E+01	0.00E+00	1.38E-01	1.38E-01	1
20	15.732	18.428	7	5.13E+03	0.00E+00	5.13E+03	5.18E+03	0.00E+00	2.27E+01	5.15E+03	8
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	6.17E+02	0.00E+00	2.70E+00	2.70E+00	2
24	15.675	18.447	4	7.41E+03	0.00E+00	7.41E+03	7.48E+03	0.00E+00	3.27E+01	7.44E+03	8
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	1.34E+03	0.00E+00	5.86E+00	5.86E+00	3
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	3.57E-02	0.00E+00	1.56E-04	1.56E-04	1
27	15.405	18.172	4	7.14E-01	0.00E+00	7.14E-01	7.95E+00	0.00E+00	3.48E-02	7.49E-01	2
28	15.433	18.082	4	1.14E-03	0.00E+00	1.14E-03	2.13E+02	0.00E+00	9.32E-01	9.33E-01	2
29	15.452	18.232	4	6.54E+00	0.00E+00	6.54E+00	7.20E+00	0.00E+00	3.15E-02	6.57E+00	4
31	15.526	18.028	4	6.75E-05	0.00E+00	6.75E-05	2.23E+02	0.00E+00	9.76E-01	9.76E-01	2
72	15.153	17.386	2	0.00E+00	0.00E+00	0.00E+00	5.19E+01	0.00E+00	2.27E-01	2.27E-01	1
94	15.517	18.257	1	6.87E-01	0.00E+00	6.87E-01	1.25E+00	0.00E+00	5.47E-03	6.92E-01	2
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	1.07E+03	0.00E+00	4.68E+00	4.68E+00	3
96	15.529	18.169	7	7.01E-01	0.00E+00	7.01E-01	2.89E+01	0.00E+00	1.26E-01	8.27E-01	2
97	15.607	18.398	28	2.49E+01	0.00E+00	2.49E+01	2.47E+03	0.00E+00	1.08E+01	3.57E+01	6
98	15.562	18.363	5	4.46E+00	0.00E+00	4.46E+00	6.83E+02	0.00E+00	2.99E+00	7.45E+00	4
119	15.063	18.848	4	8.82E+00	0.00E+00	8.82E+00	8.82E+00	0.00E+00	3.86E-02	8.86E+00	4
130	15.248	17.308	16	0.00E+00	0.00E+00	0.00E+00	8.35E+00	0.00E+00	3.65E-02	3.65E-02	1
133	15.733	18.328	9	1.28E+03	0.00E+00	1.28E+03	2.99E+03	0.00E+00	1.31E+01	1.29E+03	8
134	15.206	17.396	10	0.00E+00	0.00E+00	0.00E+00	2.73E+01	0.00E+00	1.19E-01	1.19E-01	1
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	2.54E+02	0.00E+00	1.11E+00	1.11E+00	2
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	1.52E+03	0.00E+00	6.65E+00	6.65E+00	4
140	15.641	18.402	24	1.25E+01	0.00E+00	1.25E+01	5.15E+02	0.00E+00	2.25E+00	1.48E+01	4
141	15.601	18.327	10	7.81E+00	0.00E+00	7.81E+00	2.76E+03	0.00E+00	1.21E+01	1.99E+01	5
143	15.719	18.229	16	1.11E+00	0.00E+00	1.11E+00	2.79E+03	0.00E+00	1.22E+01	1.33E+01	4
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	1.78E+02	0.00E+00	7.79E-01	7.79E-01	2
190	16.032	16.870	4	0.00E+00	0.00E+00	0.00E+00	6.72E-02	0.00E+00	2.94E-04	2.94E-04	1
192	16.005	16.725	4	0.00E+00	0.00E+00	0.00E+00	2.91E-02	0.00E+00	1.27E-04	1.27E-04	1
203	15.677	18.330	1	2.17E+03	0.00E+00	2.17E+03	4.83E+03	0.00E+00	2.11E+01	2.19E+03	8
220	15.484	18.048	3	4.86E-04	0.00E+00	4.86E-04	365.955	0.00E+00	1.60E+00	1.60E+00	2
225	15.036	18.722	4	1.09E+00	0.00E+00	1.09E+00	90.39755	0.00E+00	3.95E-01	1.49E+00	2
227	15.113	17.328	1	0.00E+00	0.00E+00	0.00E+00	52.6101	0.00E+00	2.30E-01	2.30E-01	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	701.8524	0.00E+00	3.07E+00	3.07E+00	3

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

VX 152mm Artillery
Light Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (15.50, 19.45)							
20	15.732	18.428	7	2.42E-03	6.12E-02	3.39E-03	2.42E-03	6.12E-02	4.32E-01	4.35E-01	2
23	15.640	18.125	6	9.62E-02	7.67E-01	1.35E-01	9.62E-02	7.67E-01	5.50E+00	5.64E+00	3
24	15.675	18.447	4	9.54E-02	1.04E+00	1.34E-01	9.54E-02	1.04E+00	7.41E+00	7.55E+00	4
25	15.684	18.075	1	9.64E-03	1.14E-01	1.35E-02	9.64E-03	1.14E-01	8.11E-01	8.25E-01	2
26	15.384	17.995	5	2.09E-02	0.00E+00	2.93E-02	2.09E-02	0.00E+00	2.93E-02	5.85E-02	1
27	15.405	18.172	4	9.38E-02	8.49E-01	1.31E-01	9.38E-02	8.49E-01	6.07E+00	6.21E+00	4
28	15.433	18.082	4	1.14E-01	7.34E-01	1.60E-01	1.14E-01	7.34E-01	5.30E+00	5.46E+00	3
29	15.452	18.232	4	2.64E-01	2.38E+00	3.70E-01	2.64E-01	2.38E+00	1.70E+01	1.74E+01	5
30	15.476	18.303	5	3.90E-01	3.84E+00	5.46E-01	3.90E-01	3.84E+00	2.74E+01	2.80E+01	5
31	15.526	18.028	4	1.93E-01	8.42E-01	2.70E-01	1.93E-01	8.42E-01	6.16E+00	6.43E+00	4
32	15.369	18.094	4	1.75E-02	1.66E-01	2.45E-02	1.75E-02	1.66E-01	1.19E+00	1.21E+00	2
82	15.413	19.029	3	4.41E-01	6.99E+00	6.17E-01	4.41E-01	6.99E+00	4.95E+01	5.02E+01	7
92	15.441	19.341	4	1.86E+00	5.23E+01	2.60E+00	1.86E+00	5.23E+01	3.69E+02	3.71E+02	8
94	15.517	18.257	1	4.17E-01	3.96E+00	5.84E-01	4.17E-01	3.96E+00	2.83E+01	2.89E+01	5
95	15.626	18.194	33	1.60E-01	1.42E+00	2.24E-01	1.60E-01	1.42E+00	1.02E+01	1.04E+01	4
96	15.529	18.169	7	3.33E-01	2.77E+00	4.66E-01	3.33E-01	2.77E+00	1.99E+01	2.03E+01	5
97	15.607	18.398	28	3.57E-01	3.72E+00	5.00E-01	3.57E-01	3.72E+00	2.65E+01	2.70E+01	5
98	15.562	18.363	5	5.07E-01	5.12E+00	7.10E-01	5.07E-01	5.12E+00	3.65E+01	3.73E+01	6
133	15.733	18.328	9	1.39E-03	3.97E-02	1.95E-03	1.39E-03	3.97E-02	2.80E-01	2.82E-01	2
137	15.561	17.979	6	1.42E-01	3.58E-01	1.99E-01	1.42E-01	3.58E-01	2.70E+00	2.90E+00	2
138	15.585	18.218	2	2.90E-01	2.63E+00	4.06E-01	2.90E-01	2.63E+00	1.88E+01	1.92E+01	5
139	15.506	19.036	2	1.22E+01	1.90E+02	1.71E+01	1.22E+01	1.90E+02	1.35E+03	1.36E+03	8
140	15.641	18.402	24	1.98E-01	2.10E+00	2.77E-01	1.98E-01	2.10E+00	1.50E+01	1.53E+01	5
141	15.601	18.327	10	3.11E-01	3.13E+00	4.35E-01	3.11E-01	3.13E+00	2.23E+01	2.28E+01	5
143	15.719	18.229	16	3.11E-03	6.84E-02	4.35E-03	3.11E-03	6.84E-02	4.83E-01	4.88E-01	2
144	15.555	18.123	4	2.65E-01	1.96E+00	3.71E-01	2.65E-01	1.96E+00	1.41E+01	1.45E+01	4
203	15.677	18.330	1	6.18E-02	6.84E-01	8.65E-02	6.18E-02	6.84E-01	4.87E+00	4.96E+00	3
220	15.484	18.048	3	1.75E-01	8.97E-01	2.45E-01	1.75E-01	8.97E-01	6.52E+00	6.77E+00	4
238	15.612	17.946	2	6.79E-02	0.00E+00	9.51E-02	6.79E-02	0.00E+00	9.51E-02	1.90E-01	1
Case 2: Protected				18 rounds at aimpoint (15.50, 19.45)							
20	15.732	18.428	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-02	3.98E-01	3.98E-01	2
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-01	5.00E+00	5.00E+00	3
24	15.675	18.447	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-01	6.78E+00	6.78E+00	4
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-01	7.42E-01	7.42E-01	2
27	15.405	18.172	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-01	5.53E+00	5.53E+00	3
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-01	4.78E+00	4.78E+00	3
29	15.452	18.232	4	0.00E+00	0.00E+00	0.00E+00	3.47E-04	2.22E+00	1.55E+01	1.55E+01	5
30	15.476	18.303	5	0.00E+00	0.00E+00	0.00E+00	5.15E-04	3.57E+00	2.50E+01	2.50E+01	5
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	6.66E-08	7.83E-01	5.48E+00	5.48E+00	3
32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-01	1.08E+00	1.08E+00	2
82	15.413	19.029	3	4.69E-09	2.33E+00	6.57E-09	1.31E-03	6.67E+00	4.67E+01	4.67E+01	6
92	15.441	19.341	4	3.02E-03	1.74E+01	4.23E-03	1.48E-02	4.99E+01	3.49E+02	3.49E+02	8
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	5.56E-04	3.68E+00	2.58E+01	2.58E+01	5
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	4.17E-04	2.58E+00	1.81E+01	1.81E+01	5
97	15.607	18.398	28	0.00E+00	0.00E+00	0.00E+00	4.24E-04	3.46E+00	2.42E+01	2.42E+01	5
98	15.562	18.363	5	0.00E+00	0.00E+00	0.00E+00	9.15E-04	4.76E+00	3.33E+01	3.33E+01	6
133	15.733	18.328	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-02	2.59E-01	2.59E-01	2
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-01	2.33E+00	2.33E+00	2
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	3.70E-04	2.45E+00	1.72E+01	1.72E+01	5
139	15.506	19.036	2	1.97E-01	6.33E+01	2.76E-01	6.02E-01	1.81E+02	1.27E+03	1.27E+03	8
140	15.641	18.402	24	0.00E+00	0.00E+00	0.00E+00	2.48E-04	1.95E+00	1.37E+01	1.37E+01	4
141	15.601	18.327	10	0.00E+00	0.00E+00	0.00E+00	4.25E-04	2.91E+00	2.04E+01	2.04E+01	5
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-02	4.46E-01	4.46E-01	2
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	2.77E-04	1.82E+00	1.27E+01	1.27E+01	4
203	15.677	18.330	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-01	4.45E+00	4.45E+00	3
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-01	5.84E+00	5.84E+00	3

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

VX MRLS
Moderate Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (15.45, 19.80)							
8	15.018	18.957	5	1.33E-02	0.00E+00	1.86E-02	1.33E-02	0.00E+00	1.86E-02	3.72E-02	1
10	15.059	19.065	2	2.17E-01	1.02E+00	3.04E-01	2.17E-01	1.02E+00	7.44E+00	7.75E+00	4
15	15.135	17.274	2	1.66E-01	0.00E+00	2.32E-01	1.66E-01	0.00E+00	2.32E-01	4.65E-01	2
17	15.252	17.386	4	5.24E-01	0.00E+00	7.34E-01	5.24E-01	0.00E+00	7.34E-01	1.47E+00	2
18	15.173	17.315	9	2.69E-01	0.00E+00	3.77E-01	2.69E-01	0.00E+00	3.77E-01	7.53E-01	2
20	15.732	18.428	7	1.33E+00	2.18E+00	1.86E+00	1.33E+00	2.18E+00	1.71E+01	1.90E+01	5
23	15.640	18.125	6	1.39E+00	7.48E-01	1.95E+00	1.39E+00	7.48E-01	7.18E+00	9.13E+00	4
24	15.675	18.447	4	2.09E+00	3.99E+00	2.93E+00	2.09E+00	3.99E+00	3.09E+01	3.38E+01	6
25	15.684	18.075	1	1.13E+00	3.91E-01	1.58E+00	1.13E+00	3.91E-01	4.32E+00	5.90E+00	3
26	15.384	17.995	5	1.38E+00	3.41E-01	1.93E+00	1.38E+00	3.41E-01	4.32E+00	6.25E+00	4
27	15.405	18.172	4	1.73E+00	1.35E+00	2.42E+00	1.73E+00	1.35E+00	1.19E+01	1.43E+01	4
28	15.433	18.082	4	1.53E+00	7.64E-01	2.14E+00	1.53E+00	7.64E-01	7.49E+00	9.63E+00	4
29	15.452	18.232	4	1.85E+00	1.82E+00	2.59E+00	1.85E+00	1.82E+00	1.53E+01	1.79E+01	5
30	15.476	18.303	5	1.93E+00	2.41E+00	2.70E+00	1.93E+00	2.41E+00	1.96E+01	2.23E+01	5
31	15.526	18.028	4	1.27E+00	2.74E-01	1.78E+00	1.27E+00	2.74E-01	3.70E+00	5.47E+00	3
32	15.369	18.094	4	1.49E+00	7.02E-01	2.09E+00	1.49E+00	7.02E-01	7.00E+00	9.09E+00	4
72	15.153	17.386	2	2.34E-01	0.00E+00	3.28E-01	2.34E-01	0.00E+00	3.28E-01	6.55E-01	2
82	15.413	19.029	3	2.74E+01	3.93E+02	3.84E+01	2.74E+01	3.93E+02	2.79E+03	2.83E+03	8
91	15.692	19.420	4	4.58E+01	1.03E+03	6.41E+01	4.58E+01	1.03E+03	7.27E+03	7.34E+03	8
92	15.441	19.341	4	7.12E+01	7.54E+02	9.97E+01	7.12E+01	7.54E+02	5.38E+03	5.48E+03	8
94	15.517	18.257	1	1.66E+00	1.48E+00	2.32E+00	1.66E+00	1.48E+00	1.27E+01	1.50E+01	5
95	15.626	18.194	33	1.52E+00	1.22E+00	2.13E+00	1.52E+00	1.22E+00	1.07E+01	1.28E+01	4
96	15.529	18.169	7	1.46E+00	8.36E-01	2.04E+00	1.46E+00	8.36E-01	7.90E+00	9.94E+00	4
97	15.607	18.398	28	2.08E+00	3.43E+00	2.91E+00	2.08E+00	3.43E+00	2.69E+01	2.98E+01	5
98	15.562	18.363	5	1.86E+00	2.55E+00	2.60E+00	1.86E+00	2.55E+00	2.05E+01	2.31E+01	5
119	15.063	18.848	4	1.32E-01	4.13E-01	1.85E-01	1.32E-01	4.13E-01	3.08E+00	3.26E+00	3
120	15.074	19.229	12	5.95E-01	9.02E-01	8.33E-01	5.95E-01	9.02E-01	7.15E+00	7.98E+00	4
124	15.107	19.036	1	1.28E+00	7.55E+00	1.79E+00	1.28E+00	7.55E+00	5.46E+01	5.64E+01	7
125	15.009	19.087	2	6.50E-03	0.00E+00	9.10E-03	6.50E-03	0.00E+00	9.10E-03	1.82E-02	1
128	15.124	19.175	4	4.15E+00	3.09E+01	5.81E+00	4.15E+00	3.09E+01	2.22E+02	2.28E+02	8
130	15.248	17.308	16	4.63E-01	0.00E+00	6.48E-01	4.63E-01	0.00E+00	6.48E-01	1.30E+00	2
133	15.733	18.328	9	1.11E+00	1.33E+00	1.55E+00	1.11E+00	1.33E+00	1.09E+01	1.24E+01	4
134	15.206	17.396	10	3.99E-01	0.00E+00	5.59E-01	3.99E-01	0.00E+00	5.59E-01	1.12E+00	2
137	15.561	17.979	6	1.19E+00	1.78E-01	1.67E+00	1.19E+00	1.78E-01	2.91E+00	4.58E+00	3
138	15.585	18.218	2	1.55E+00	1.23E+00	2.17E+00	1.55E+00	1.23E+00	1.08E+01	1.30E+01	4
139	15.506	19.036	2	2.67E+01	1.28E+02	3.74E+01	2.67E+01	1.28E+02	9.33E+02	9.71E+02	8
140	15.641	18.402	24	2.11E+00	3.64E+00	2.95E+00	2.11E+00	3.64E+00	2.84E+01	3.14E+01	6
141	15.601	18.327	10	1.84E+00	2.38E+00	2.58E+00	1.84E+00	2.38E+00	1.92E+01	2.18E+01	5
143	15.719	18.229	16	1.11E+00	8.69E-01	1.55E+00	1.11E+00	8.69E-01	7.64E+00	9.19E+00	4
144	15.555	18.123	4	1.35E+00	6.00E-01	1.89E+00	1.35E+00	6.00E-01	6.09E+00	7.98E+00	4
203	15.677	18.330	1	1.68E+00	2.20E+00	2.35E+00	1.68E+00	2.20E+00	1.78E+01	2.01E+01	5
220	15.484	18.048	3	1.38E+00	4.73E-01	1.93E+00	1.38E+00	4.73E-01	5.24E+00	7.18E+00	4
225	15.036	18.722	4	1.98E-02	2.03E-02	2.77E-02	1.98E-02	2.03E-02	1.70E-01	1.98E-01	1
227	15.113	17.328	1	1.31E-01	0.00E+00	1.83E-01	1.31E-01	0.00E+00	1.83E-01	3.67E-01	2
238	15.612	17.946	2	1.16E+00	2.02E-01	1.62E+00	1.16E+00	2.02E-01	3.04E+00	4.66E+00	3
Case 2: Protected				240 rounds at aimpoint (15.45, 19.80)							
8	15.018	18.957	5	0.00E+00	0.00E+00	0.00E+00	5.43E-03	0.00E+00	7.60E-03	7.60E-03	1
10	15.059	19.065	2	2.33E-02	4.36E-03	3.26E-02	9.15E-02	9.46E-01	6.75E+00	6.78E+00	4
17	15.252	17.386	4	0.00E+00	0.00E+00	0.00E+00	2.76E-05	0.00E+00	3.86E-05	3.86E-05	1
20	15.732	18.428	7	0.00E+00	0.00E+00	0.00E+00	9.77E-01	2.01E+00	1.54E+01	1.54E+01	5
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	1.12E+00	4.85E-01	4.96E+00	4.96E+00	3
24	15.675	18.447	4	0.00E+00	0.00E+00	0.00E+00	1.47E+00	3.64E+00	2.75E+01	2.75E+01	5
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	8.95E-01	1.59E-01	2.37E+00	2.37E+00	2
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	9.05E-01	1.67E-01	2.44E+00	2.44E+00	2
27	15.405	18.172	4	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.07E+00	9.35E+00	9.35E+00	4
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	1.13E+00	5.63E-01	5.52E+00	5.52E+00	3
29	15.452	18.232	4	0.00E+00	0.00E+00	0.00E+00	1.44E+00	1.56E+00	1.29E+01	1.29E+01	4
30	15.476	18.303	5	0.00E+00	0.00E+00	0.00E+00	1.51E+00	2.13E+00	1.70E+01	1.70E+01	5
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	9.12E-01	6.47E-02	1.73E+00	1.73E+00	2

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	1.12E+00	4.80E-01	4.93E+00	4.93E+00	3
82	15.413	19.029	3	1.88E+00	1.17E+02	2.63E+00	6.88E+00	3.73E+02	2.62E+03	2.62E+03	8
91	15.692	19.420	4	1.27E+00	3.44E+02	1.78E+00	3.89E+00	9.84E+02	6.89E+03	6.90E+03	8
92	15.441	19.341	4	2.18E+00	2.42E+02	3.05E+00	7.08E+00	7.19E+02	5.04E+03	5.05E+03	8
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	1.34E+00	1.22E+00	1.04E+01	1.04E+01	4
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	1.24E+00	9.12E-01	8.12E+00	8.12E+00	4
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	1.18E+00	5.87E-01	5.76E+00	5.76E+00	3
97	15.607	18.398	28	0.00E+00	0.00E+00	0.00E+00	1.53E+00	3.08E+00	2.37E+01	2.37E+01	5
98	15.562	18.363	5	0.00E+00	0.00E+00	0.00E+00	1.43E+00	2.26E+00	1.78E+01	1.78E+01	5
119	15.063	18.848	4	1.24E-04	0.00E+00	1.74E-04	6.38E-02	3.84E-01	2.78E+00	2.78E+00	2
120	15.074	19.229	12	7.68E-02	2.50E-01	1.08E-01	2.26E-01	8.57E-01	6.32E+00	6.42E+00	4
124	15.107	19.036	1	1.14E-01	9.39E-02	1.60E-01	5.16E-01	7.03E+00	4.99E+01	5.01E+01	7
125	15.009	19.087	2	6.11E-04	0.00E+00	8.55E-04	2.47E-03	0.00E+00	3.46E-03	4.31E-03	1
128	15.124	19.175	4	5.60E-01	8.19E+00	7.84E-01	1.72E+00	2.93E+01	2.08E+02	2.08E+02	8
133	15.733	18.328	9	0.00E+00	0.00E+00	0.00E+00	8.81E-01	1.14E+00	9.21E+00	9.21E+00	4
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	7.99E-01	2.59E-02	1.30E+00	1.30E+00	2
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	1.27E+00	9.88E-01	8.69E+00	8.69E+00	4
139	15.506	19.036	2	1.90E+00	2.80E+01	2.66E+00	6.87E+00	1.21E+02	8.57E+02	8.59E+02	8
140	15.641	18.402	24	0.00E+00	0.00E+00	0.00E+00	1.55E+00	3.25E+00	2.49E+01	2.49E+01	5
141	15.601	18.327	10	0.00E+00	0.00E+00	0.00E+00	1.43E+00	2.09E+00	1.66E+01	1.66E+01	5
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	9.11E-01	6.17E-01	5.59E+00	5.59E+00	3
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	1.08E+00	3.78E-01	4.16E+00	4.16E+00	3
203	15.677	18.330	1	0.00E+00	0.00E+00	0.00E+00	1.30E+00	1.85E+00	1.48E+01	1.48E+01	4
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	9.94E-01	2.51E-01	3.15E+00	3.15E+00	3
225	15.036	18.722	4	0.00E+00	0.00E+00	0.00E+00	1.82E-02	1.89E-02	1.58E-01	1.58E-01	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	7.27E-01	0.00E+00	1.02E+00	1.02E+00	2

VX MRLS
Heavy Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				720 rounds at aimpoint (16.20, 18.85)							
1	16.058	16.697	2	2.87E+00	1.59E+00	4.02E+00	2.87E+00	1.59E+00	1.51E+01	1.92E+01	5
2	16.495	18.182	2	4.55E+01	1.65E+03	6.37E+01	4.55E+01	1.65E+03	1.16E+04	1.17E+04	8
3	16.398	18.288	5	3.68E+01	6.70E+02	5.15E+01	3.68E+01	6.70E+02	4.74E+03	4.79E+03	8
6	16.013	17.002	2	4.21E+00	6.89E+00	5.89E+00	4.21E+00	6.89E+00	5.41E+01	6.00E+01	7
11	16.118	16.767	2	3.12E+00	2.46E+00	4.37E+00	3.12E+00	2.46E+00	2.16E+01	2.60E+01	5
16	16.187	16.658	4	3.11E+00	1.97E+00	4.35E+00	3.11E+00	1.97E+00	1.81E+01	2.25E+01	5
19	16.065	16.500	4	2.44E+00	4.98E-01	3.42E+00	2.44E+00	4.98E-01	6.90E+00	1.03E+01	4
20	15.732	18.428	7	5.04E+01	1.80E+03	7.06E+01	5.04E+01	1.80E+03	1.27E+04	1.27E+04	8
21	16.357	16.781	7	3.09E+00	2.45E+00	4.33E+00	3.09E+00	2.45E+00	2.15E+01	2.58E+01	5
22	16.263	17.082	8	5.30E+00	1.22E+01	7.42E+00	5.30E+00	1.22E+01	9.28E+01	1.00E+02	8
23	15.640	18.125	6	1.72E+01	2.56E+02	2.41E+01	1.72E+01	2.56E+02	1.82E+03	1.84E+03	8
24	15.675	18.447	4	1.48E+01	3.93E+02	2.07E+01	1.48E+01	3.93E+02	2.77E+03	2.79E+03	8
25	15.684	18.075	1	3.02E+01	9.38E+02	4.23E+01	3.02E+01	9.38E+02	6.61E+03	6.65E+03	8
48	15.950	15.453	6	1.35E+00	0.00E+00	1.89E+00	1.35E+00	0.00E+00	1.89E+00	3.78E+00	3
50	15.975	14.694	3	9.40E-01	0.00E+00	1.32E+00	9.40E-01	0.00E+00	1.32E+00	2.63E+00	2
51	15.970	15.328	6	1.30E+00	0.00E+00	1.82E+00	1.30E+00	0.00E+00	1.82E+00	3.64E+00	3
52	15.803	14.834	2	7.29E-01	0.00E+00	1.02E+00	7.29E-01	0.00E+00	1.02E+00	2.04E+00	2
53	15.716	14.523	2	3.99E-01	0.00E+00	5.59E-01	3.99E-01	0.00E+00	5.59E-01	1.12E+00	2
54	15.841	14.686	3	7.55E-01	0.00E+00	1.06E+00	7.55E-01	0.00E+00	1.06E+00	2.11E+00	2
55	15.746	15.374	2	7.44E-01	0.00E+00	1.04E+00	7.44E-01	0.00E+00	1.04E+00	2.08E+00	2
56	16.489	14.995	2	1.02E+00	0.00E+00	1.43E+00	1.02E+00	0.00E+00	1.43E+00	2.86E+00	2
57	15.907	15.517	2	1.33E+00	0.00E+00	1.86E+00	1.33E+00	0.00E+00	1.86E+00	3.72E+00	3
58	15.921	14.547	3	8.13E-01	0.00E+00	1.14E+00	8.13E-01	0.00E+00	1.14E+00	2.28E+00	2
59	16.339	14.858	3	1.08E+00	0.00E+00	1.51E+00	1.08E+00	0.00E+00	1.51E+00	3.02E+00	3
60	16.396	14.734	3	9.81E-01	0.00E+00	1.37E+00	9.81E-01	0.00E+00	1.37E+00	2.75E+00	2
61	16.479	14.715	3	8.90E-01	0.00E+00	1.25E+00	8.90E-01	0.00E+00	1.25E+00	2.49E+00	2
62	16.143	14.987	4	1.20E+00	0.00E+00	1.68E+00	1.20E+00	0.00E+00	1.68E+00	3.36E+00	3
63	16.376	15.063	2	1.18E+00	0.00E+00	1.65E+00	1.18E+00	0.00E+00	1.65E+00	3.30E+00	3
77	16.101	16.650	2	2.71E+00	1.19E+00	3.79E+00	2.71E+00	1.19E+00	1.21E+01	1.59E+01	5
83	15.850	15.349	2	1.08E+00	0.00E+00	1.51E+00	1.08E+00	0.00E+00	1.51E+00	3.02E+00	3
84	15.751	14.664	3	5.29E-01	0.00E+00	7.41E-01	5.29E-01	0.00E+00	7.41E-01	1.48E+00	2

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

85	15.813	15.577	2	1.09E+00	0.00E+00	1.53E+00	1.09E+00	0.00E+00	1.53E+00	3.05E+00	3
89	16.009	18.852	4	5.12E+00	4.61E+02	7.17E+00	5.12E+00	4.61E+02	3.23E+03	3.24E+03	8
93	16.187	16.809	7	3.67E+00	3.96E+00	5.14E+00	3.67E+00	3.96E+00	3.29E+01	3.80E+01	6
95	15.626	18.194	33	1.42E+01	1.95E+02	1.99E+01	1.42E+01	1.95E+02	1.38E+03	1.40E+03	8
97	15.607	18.398	28	1.18E+00	8.51E+00	1.65E+00	1.18E+00	8.51E+00	6.12E+01	6.29E+01	7
98	15.562	18.363	5	7.42E-03	0.00E+00	1.04E-02	7.42E-03	0.00E+00	1.04E-02	2.08E-02	1
99	16.079	16.804	3	3.14E+00	2.69E+00	4.40E+00	3.14E+00	2.69E+00	2.32E+01	2.76E+01	5
100	16.436	18.381	3	3.11E+01	1.48E+03	4.35E+01	3.11E+01	1.48E+03	1.04E+04	1.04E+04	8
101	16.286	18.545	1	4.33E+01	6.60E+02	6.06E+01	4.33E+01	6.60E+02	4.68E+03	4.74E+03	8
102	16.523	18.281	2	4.58E+01	1.29E+03	6.41E+01	4.58E+01	1.29E+03	9.09E+03	9.16E+03	8
103	16.329	18.484	2	6.90E+01	2.10E+03	9.66E+01	6.90E+01	2.10E+03	1.48E+04	1.49E+04	8
104	16.470	18.045	6	5.09E+01	6.67E+02	7.13E+01	5.09E+01	6.67E+02	4.74E+03	4.81E+03	8
105	16.350	18.091	1	4.58E+01	8.14E+02	6.41E+01	4.58E+01	8.14E+02	5.76E+03	5.83E+03	8
106	16.332	18.240	1	6.87E+01	1.34E+03	9.62E+01	6.87E+01	1.34E+03	9.48E+03	9.57E+03	8
107	16.493	18.354	6	4.28E+01	1.58E+03	5.99E+01	4.28E+01	1.58E+03	1.11E+04	1.12E+04	8
108	16.408	18.056	12	5.99E+01	1.43E+03	8.39E+01	5.99E+01	1.43E+03	1.01E+04	1.02E+04	8
112	16.100	17.033	3	3.95E+00	7.41E+00	5.53E+00	3.95E+00	7.41E+00	5.74E+01	6.29E+01	7
121	16.226	16.924	3	4.30E+00	6.34E+00	6.02E+00	4.30E+00	6.34E+00	5.04E+01	5.64E+01	7
129	16.188	16.473	40	2.65E+00	7.16E-01	3.71E+00	2.65E+00	7.16E-01	8.72E+00	1.24E+01	4
131	16.175	16.676	2	3.13E+00	2.09E+00	4.38E+00	3.13E+00	2.09E+00	1.90E+01	2.34E+01	5
132	16.015	16.530	5	2.54E+00	6.37E-01	3.56E+00	2.54E+00	6.37E-01	8.02E+00	1.16E+01	4
133	15.733	18.328	9	5.18E+01	1.69E+03	7.25E+01	5.18E+01	1.69E+03	1.19E+04	1.20E+04	8
135	16.324	16.829	12	3.45E+00	3.43E+00	4.83E+00	3.45E+00	3.43E+00	2.88E+01	3.37E+01	6
136	16.374	16.990	4	3.83E+00	6.23E+00	5.36E+00	3.83E+00	6.23E+00	4.90E+01	5.43E+01	7
137	15.561	17.979	6	4.58E-02	1.17E-01	6.41E-02	4.58E-02	1.17E-01	8.83E-01	9.47E-01	2
138	15.585	18.218	2	7.43E-02	0.00E+00	1.04E-01	7.43E-02	0.00E+00	1.04E-01	2.08E-01	1
140	15.641	18.402	24	6.29E+00	6.79E-01	8.81E+00	6.29E+00	6.79E-01	1.36E+01	2.24E+01	5
141	15.601	18.327	10	4.33E-01	2.85E+01	6.06E-01	4.33E-01	2.85E+01	2.00E+02	2.01E+02	8
143	15.719	18.229	16	3.87E+01	7.31E+02	5.42E+01	3.87E+01	7.31E+02	5.17E+03	5.23E+03	8
144	15.555	18.123	4	2.10E-02	4.06E-02	2.94E-02	2.10E-02	4.06E-02	3.14E-01	3.43E-01	2
154	15.921	15.357	16	1.25E+00	0.00E+00	1.75E+00	1.25E+00	0.00E+00	1.75E+00	3.50E+00	3
160	15.588	14.773	2	1.67E-01	0.00E+00	2.34E-01	1.67E-01	0.00E+00	2.34E-01	4.68E-01	2
161	16.283	14.887	12	1.13E+00	0.00E+00	1.58E+00	1.13E+00	0.00E+00	1.58E+00	3.16E+00	3
162	15.618	14.622	2	2.10E-01	0.00E+00	2.94E-01	2.10E-01	0.00E+00	2.94E-01	5.88E-01	2
163	15.853	14.526	3	7.13E-01	0.00E+00	9.98E-01	7.13E-01	0.00E+00	9.98E-01	2.00E+00	2
164	15.667	14.794	3	3.41E-01	0.00E+00	4.77E-01	3.41E-01	0.00E+00	4.77E-01	9.55E-01	2
165	15.824	14.794	3	7.62E-01	0.00E+00	1.07E+00	7.62E-01	0.00E+00	1.07E+00	2.13E+00	2
166	16.178	15.100	4	1.28E+00	0.00E+00	1.79E+00	1.28E+00	0.00E+00	1.79E+00	3.58E+00	3
167	15.684	15.464	2	5.35E-01	0.00E+00	7.49E-01	5.35E-01	0.00E+00	7.49E-01	1.50E+00	2
168	15.780	15.281	2	8.33E-01	0.00E+00	1.17E+00	8.33E-01	0.00E+00	1.17E+00	2.33E+00	2
169	15.735	15.486	2	7.42E-01	0.00E+00	1.04E+00	7.42E-01	0.00E+00	1.04E+00	2.08E+00	2
170	16.241	14.979	9	1.21E+00	0.00E+00	1.69E+00	1.21E+00	0.00E+00	1.69E+00	3.39E+00	3
171	16.233	15.088	4	1.28E+00	0.00E+00	1.79E+00	1.28E+00	0.00E+00	1.79E+00	3.58E+00	3
172	16.219	14.747	1	1.06E+00	0.00E+00	1.48E+00	1.06E+00	0.00E+00	1.48E+00	2.97E+00	2
173	16.407	14.834	1	1.02E+00	0.00E+00	1.43E+00	1.02E+00	0.00E+00	1.43E+00	2.86E+00	2
174	16.174	14.734	1	1.06E+00	0.00E+00	1.48E+00	1.06E+00	0.00E+00	1.48E+00	2.97E+00	2
175	16.414	15.004	1	1.11E+00	0.00E+00	1.55E+00	1.11E+00	0.00E+00	1.55E+00	3.11E+00	3
176	16.349	14.675	1	9.74E-01	0.00E+00	1.36E+00	9.74E-01	0.00E+00	1.36E+00	2.73E+00	2
177	16.471	14.830	1	9.56E-01	0.00E+00	1.34E+00	9.56E-01	0.00E+00	1.34E+00	2.68E+00	2
178	16.157	14.868	1	1.13E+00	0.00E+00	1.58E+00	1.13E+00	0.00E+00	1.58E+00	3.16E+00	3
185	16.181	17.037	4	4.87E+00	1.05E+01	6.82E+00	4.87E+00	1.05E+01	8.03E+01	8.71E+01	8
186	16.296	16.955	4	4.33E+00	6.74E+00	6.06E+00	4.33E+00	6.74E+00	5.32E+01	5.93E+01	7
187	16.163	16.951	4	4.26E+00	7.04E+00	5.96E+00	4.26E+00	7.04E+00	5.52E+01	6.12E+01	7
189	16.264	16.500	4	2.73E+00	6.94E-01	3.82E+00	2.73E+00	6.94E-01	8.68E+00	1.25E+01	4
190	16.032	16.870	4	3.49E+00	3.85E+00	4.89E+00	3.49E+00	3.85E+00	3.18E+01	3.67E+01	6
191	16.288	16.648	4	3.02E+00	1.50E+00	4.23E+00	3.02E+00	1.50E+00	1.47E+01	1.90E+01	5
192	16.005	16.725	4	3.06E+00	1.93E+00	4.28E+00	3.06E+00	1.93E+00	1.78E+01	2.21E+01	5
193	16.112	16.912	4	3.58E+00	4.59E+00	5.01E+00	3.58E+00	4.59E+00	3.71E+01	4.22E+01	6
194	16.252	16.789	4	3.61E+00	3.28E+00	5.05E+00	3.61E+00	3.28E+00	2.80E+01	3.31E+01	6
197	15.916	14.875	6	9.71E-01	0.00E+00	1.36E+00	9.71E-01	0.00E+00	1.36E+00	2.72E+00	2
199	15.987	14.868	2	1.04E+00	0.00E+00	1.46E+00	1.04E+00	0.00E+00	1.46E+00	2.91E+00	2
201	15.916	14.708	2	8.88E-01	0.00E+00	1.24E+00	8.88E-01	0.00E+00	1.24E+00	2.49E+00	2
202	16.294	14.763	6	1.05E+00	0.00E+00	1.47E+00	1.05E+00	0.00E+00	1.47E+00	2.94E+00	2
203	15.677	18.330	1	2.06E+01	8.22E+02	2.88E+01	2.06E+01	8.22E+02	5.78E+03	5.81E+03	8
204	16.461	18.591	1	1.28E+01	6.83E+02	1.79E+01	1.28E+01	6.83E+02	4.80E+03	4.82E+03	8
209	16.134	16.486	1	2.53E+00	6.37E-01	3.54E+00	2.53E+00	6.37E-01	8.00E+00	1.15E+01	4
212	16.315	15.061	2	1.22E+00	0.00E+00	1.71E+00	1.22E+00	0.00E+00	1.71E+00	3.42E+00	3
213	16.228	14.881	2	1.14E+00	0.00E+00	1.60E+00	1.14E+00	0.00E+00	1.60E+00	3.19E+00	3

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

214	15.841	15.478	1	1.13E+00	0.00E+00	1.58E+00	1.13E+00	0.00E+00	1.58E+00	3.16E+00	3
215	16.269	18.118	2	6.00E+01	8.44E+02	8.40E+01	6.00E+01	8.44E+02	5.99E+03	6.08E+03	8
221	16.393	18.433	10	2.29E+01	5.57E+02	3.21E+01	2.29E+01	5.57E+02	3.93E+03	3.96E+03	8
222	16.447	18.213	2	7.41E+01	2.52E+03	1.04E+02	7.41E+01	2.52E+03	1.77E+04	1.78E+04	8
223	16.300	18.359	2	4.88E+01	5.74E+02	6.83E+01	4.88E+01	5.74E+02	4.09E+03	4.15E+03	8
226	16.382	18.616	1	2.90E+01	9.72E+02	4.06E+01	2.90E+01	9.72E+02	6.84E+03	6.89E+03	8
228	15.701	15.607	2	6.45E-01	0.00E+00	9.03E-01	6.45E-01	0.00E+00	9.03E-01	1.81E+00	2
232	15.630	14.497	6	2.17E-01	0.00E+00	3.04E-01	2.17E-01	0.00E+00	3.04E-01	6.08E-01	2
233	15.692	14.599	3	3.60E-01	0.00E+00	5.04E-01	3.60E-01	0.00E+00	5.04E-01	1.01E+00	2
234	15.772	14.883	8	6.58E-01	0.00E+00	9.21E-01	6.58E-01	0.00E+00	9.21E-01	1.84E+00	2
236	15.710	14.733	7	4.36E-01	0.00E+00	6.10E-01	4.36E-01	0.00E+00	6.10E-01	1.22E+00	2
237	15.776	14.522	2	5.46E-01	0.00E+00	7.64E-01	5.46E-01	0.00E+00	7.64E-01	1.53E+00	2
238	15.612	17.946	2	2.56E+00	2.27E+01	3.58E+00	2.56E+00	2.27E+01	1.62E+02	1.66E+02	8
Case 2: Protected 720 rounds at aimpoint (16.05, 20.00)											
2	16.495	18.182	2	0.00E+00	0.00E+00	0.00E+00	4.32E-01	3.94E-01	3.36E+00	3.36E+00	3
3	16.398	18.288	5	0.00E+00	0.00E+00	0.00E+00	7.56E-01	2.50E+00	1.86E+01	1.86E+01	5
6	16.013	17.002	2	0.00E+00	0.00E+00	0.00E+00	5.41E-07	0.00E+00	7.57E-07	7.57E-07	1
20	15.732	18.428	7	0.00E+00	0.00E+00	0.00E+00	9.26E-01	3.93E+00	2.88E+01	2.88E+01	5
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	3.58E-01	5.04E-01	4.03E+00	4.03E+00	3
24	15.675	18.447	4	0.00E+00	0.00E+00	0.00E+00	7.72E-01	3.79E+00	2.76E+01	2.76E+01	5
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	3.44E-01	2.44E-01	2.19E+00	2.19E+00	2
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	2.18E-03	0.00E+00	3.05E-03	3.05E-03	1
27	15.405	18.172	4	0.00E+00	0.00E+00	0.00E+00	1.34E-02	0.00E+00	1.88E-02	1.88E-02	1
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	1.82E-02	0.00E+00	2.55E-02	2.55E-02	1
29	15.452	18.232	4	0.00E+00	0.00E+00	0.00E+00	4.83E-02	0.00E+00	6.76E-02	6.76E-02	1
30	15.476	18.303	5	0.00E+00	0.00E+00	0.00E+00	9.73E-02	0.00E+00	1.36E-01	1.36E-01	1
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	7.77E-02	0.00E+00	1.09E-01	1.09E-01	1
32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	3.35E-03	0.00E+00	4.69E-03	4.69E-03	1
82	15.413	19.029	3	1.87E-04	0.00E+00	2.62E-04	7.49E-03	9.01E-02	6.41E-01	6.41E-01	2
89	16.009	18.852	4	1.34E-01	5.86E+01	1.88E-01	2.11E+00	5.92E+02	4.15E+03	4.15E+03	8
90	15.914	18.998	4	1.83E-01	3.72E+01	2.56E-01	2.25E+00	2.54E+02	1.78E+03	1.78E+03	8
91	15.692	19.420	4	5.40E-02	2.82E+01	7.56E-02	7.87E-01	3.90E+02	2.73E+03	2.73E+03	8
92	15.441	19.341	4	1.20E-03	0.00E+00	1.68E-03	5.12E-03	4.21E-02	3.02E-01	3.04E-01	2
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	1.52E-01	6.73E-02	6.84E-01	6.84E-01	2
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	3.74E-01	8.27E-01	6.31E+00	6.31E+00	4
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	1.30E-01	2.97E-02	3.90E-01	3.90E-01	2
97	15.607	18.398	28	0.00E+00	0.00E+00	0.00E+00	5.47E-01	1.95E+00	1.44E+01	1.44E+01	4
98	15.562	18.363	5	0.00E+00	0.00E+00	0.00E+00	3.46E-01	6.11E-01	4.76E+00	4.76E+00	3
100	16.436	18.381	3	0.00E+00	0.00E+00	0.00E+00	8.84E-01	3.20E+00	2.36E+01	2.36E+01	5
101	16.286	18.545	1	9.67E-03	0.00E+00	1.35E-02	1.12E+00	1.10E+01	7.86E+01	7.86E+01	8
102	16.523	18.281	2	0.00E+00	0.00E+00	0.00E+00	5.08E-01	9.20E-01	7.15E+00	7.15E+00	4
103	16.329	18.484	2	2.84E-03	0.00E+00	3.98E-03	1.29E+00	1.13E+01	8.09E+01	8.09E+01	8
104	16.470	18.045	6	0.00E+00	0.00E+00	0.00E+00	3.16E-01	6.83E-02	9.21E-01	9.21E-01	2
105	16.350	18.091	1	0.00E+00	0.00E+00	0.00E+00	5.29E-01	7.95E-01	6.31E+00	6.31E+00	4
106	16.332	18.240	1	0.00E+00	0.00E+00	0.00E+00	7.22E-01	2.59E+00	1.91E+01	1.91E+01	5
107	16.493	18.354	6	0.00E+00	0.00E+00	0.00E+00	6.62E-01	1.84E+00	1.38E+01	1.38E+01	4
108	16.408	18.056	12	0.00E+00	0.00E+00	0.00E+00	4.13E-01	4.10E-01	3.45E+00	3.45E+00	3
112	16.100	17.033	3	0.00E+00	0.00E+00	0.00E+00	1.87E-05	0.00E+00	2.62E-05	2.62E-05	1
133	15.733	18.328	9	0.00E+00	0.00E+00	0.00E+00	7.47E-01	1.69E+00	1.29E+01	1.29E+01	4
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	1.11E-01	0.00E+00	1.55E-01	1.55E-01	1
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	2.83E-01	5.28E-01	4.09E+00	4.09E+00	3
139	15.506	19.036	2	2.18E-02	9.21E-02	3.05E-02	6.38E-01	3.36E+01	2.36E+02	2.36E+02	8
140	15.641	18.402	24	0.00E+00	0.00E+00	0.00E+00	6.83E-01	3.05E+00	2.23E+01	2.23E+01	5
141	15.601	18.327	10	0.00E+00	0.00E+00	0.00E+00	4.45E-01	1.23E+00	9.23E+00	9.23E+00	4
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	5.48E-01	6.43E-01	5.27E+00	5.27E+00	3
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	1.57E-01	2.41E-02	3.89E-01	3.89E-01	2
203	15.677	18.330	1	0.00E+00	0.00E+00	0.00E+00	6.34E-01	2.14E+00	1.59E+01	1.59E+01	5
204	16.461	18.591	1	0.00E+00	0.00E+00	0.00E+00	1.35E+00	1.28E+01	9.15E+01	9.15E+01	8
215	16.269	18.118	2	0.00E+00	0.00E+00	0.00E+00	4.31E-01	7.51E-01	5.86E+00	5.86E+00	3
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	4.02E-02	0.00E+00	5.63E-02	5.63E-02	1
221	16.393	18.433	10	3.44E-05	0.00E+00	4.82E-05	1.08E+00	6.20E+00	4.49E+01	4.49E+01	6
222	16.447	18.213	2	0.00E+00	0.00E+00	0.00E+00	5.34E-01	9.35E-01	7.29E+00	7.29E+00	4
223	16.300	18.359	2	0.00E+00	0.00E+00	0.00E+00	8.54E-01	5.17E+00	3.74E+01	3.74E+01	6
226	16.382	18.616	1	1.08E-02	0.00E+00	1.51E-02	1.73E+00	2.19E+01	1.56E+02	1.56E+02	8
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	1.76E-01	0.00E+00	2.46E-01	2.46E-01	1

VX 250kg Bomb

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Light Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected 2 rounds at aimpoint (16.10, 18.25)												
1	16.058	16.697	2	2.98E-01	5.11E+00	4.17E-01	2.98E-01	5.11E+00	3.62E+01	3.66E+01	6	
6	16.013	17.002	2	4.78E+00	9.68E+01	6.69E+00	4.78E+00	9.68E+01	6.84E+02	6.91E+02	8	
11	16.118	16.767	2	3.07E-06	0.00E+00	4.30E-06	3.07E-06	0.00E+00	4.30E-06	8.60E-06	1	
16	16.187	16.658	4	2.35E-01	3.94E+00	3.29E-01	2.35E-01	3.94E+00	2.79E+01	2.82E+01	5	
19	16.065	16.500	4	2.11E-01	3.36E+00	2.95E-01	2.11E-01	3.36E+00	2.38E+01	2.41E+01	5	
21	16.357	16.781	7	7.26E-06	0.00E+00	1.02E-05	7.26E-06	0.00E+00	1.02E-05	2.03E-05	1	
22	16.263	17.082	8	5.78E+00	1.24E+02	8.09E+00	5.78E+00	1.24E+02	8.76E+02	8.84E+02	8	
48	15.950	15.453	6	1.17E-01	1.45E+00	1.64E-01	1.17E-01	1.45E+00	1.03E+01	1.05E+01	4	
50	15.975	14.694	3	5.75E-02	6.09E-01	8.05E-02	5.75E-02	6.09E-01	4.34E+00	4.42E+00	3	
51	15.970	15.328	6	1.23E-01	1.51E+00	1.72E-01	1.23E-01	1.51E+00	1.07E+01	1.09E+01	4	
57	15.907	15.517	2	4.74E-02	5.94E-01	6.64E-02	4.74E-02	5.94E-01	4.22E+00	4.29E+00	3	
58	15.921	14.547	3	2.36E-02	2.67E-01	3.30E-02	2.36E-02	2.67E-01	1.90E+00	1.94E+00	2	
59	16.339	14.858	3	2.64E-02	3.88E-01	3.70E-02	2.64E-02	3.88E-01	2.75E+00	2.79E+00	2	
60	16.396	14.734	3	9.55E-07	1.81E-02	1.34E-06	9.55E-07	1.81E-02	1.27E-01	1.27E-01	1	
62	16.143	14.987	4	3.07E-02	3.33E-01	4.30E-02	3.07E-02	3.33E-01	2.37E+00	2.42E+00	2	
63	16.376	15.063	2	1.14E-05	1.10E-01	1.60E-05	1.14E-05	1.10E-01	7.70E-01	7.70E-01	2	
77	16.101	16.650	2	1.73E-05	2.09E-07	2.42E-05	1.73E-05	2.09E-07	2.57E-05	4.99E-05	1	
93	16.187	16.809	7	2.07E-01	3.73E+00	2.90E-01	2.07E-01	3.73E+00	2.64E+01	2.67E+01	5	
99	16.079	16.804	3	2.20E-02	3.98E-01	3.08E-02	2.20E-02	3.98E-01	2.82E+00	2.85E+00	2	
112	16.100	17.033	3	5.07E-07	0.00E+00	7.10E-07	5.07E-07	0.00E+00	7.10E-07	1.42E-06	1	
121	16.226	16.924	3	2.68E+00	5.22E+01	3.75E+00	2.68E+00	5.22E+01	3.69E+02	3.73E+02	8	
129	16.188	16.473	40	2.50E-01	3.93E+00	3.50E-01	2.50E-01	3.93E+00	2.79E+01	2.82E+01	5	
131	16.175	16.676	2	4.90E-02	8.46E-01	6.86E-02	4.90E-02	8.46E-01	5.99E+00	6.06E+00	4	
132	16.015	16.530	5	1.58E+00	2.39E+01	2.21E+00	1.58E+00	2.39E+01	1.70E+02	1.72E+02	8	
135	16.324	16.829	12	3.69E-02	7.25E-01	5.17E-02	3.69E-02	7.25E-01	5.13E+00	5.18E+00	3	
136	16.374	16.990	4	7.16E-08	0.00E+00	1.00E-07	7.16E-08	0.00E+00	1.00E-07	2.00E-07	1	
154	15.921	15.357	16	5.74E-02	7.35E-01	8.04E-02	5.74E-02	7.35E-01	5.23E+00	5.31E+00	3	
161	16.283	14.887	12	7.58E-02	8.19E-01	1.06E-01	7.58E-02	8.19E-01	5.84E+00	5.95E+00	3	
163	15.853	14.526	3	2.73E-07	4.74E-03	3.82E-07	2.73E-07	4.74E-03	3.32E-02	3.32E-02	1	
166	16.178	15.100	4	5.76E-02	6.60E-01	8.06E-02	5.76E-02	6.60E-01	4.70E+00	4.78E+00	3	
170	16.241	14.979	9	9.28E-02	1.04E+00	1.30E-01	9.28E-02	1.04E+00	7.41E+00	7.54E+00	4	
171	16.233	15.088	4	1.02E-01	1.17E+00	1.43E-01	1.02E-01	1.17E+00	8.33E+00	8.48E+00	4	
172	16.219	14.747	1	6.00E-02	6.57E-01	8.40E-02	6.00E-02	6.57E-01	4.68E+00	4.77E+00	3	
174	16.174	14.734	1	3.53E-02	4.00E-01	4.94E-02	3.53E-02	4.00E-01	2.85E+00	2.90E+00	2	
176	16.349	14.675	1	1.85E-02	2.25E-01	2.59E-02	1.85E-02	2.25E-01	1.60E+00	1.63E+00	2	
178	16.157	14.868	1	3.62E-02	3.78E-01	5.07E-02	3.62E-02	3.78E-01	2.70E+00	2.75E+00	2	
185	16.181	17.037	4	6.37E-02	1.25E+00	8.92E-02	6.37E-02	1.25E+00	8.84E+00	8.93E+00	4	
186	16.296	16.955	4	6.99E-01	1.36E+01	9.79E-01	6.99E-01	1.36E+01	9.62E+01	9.72E+01	8	
187	16.163	16.951	4	4.66E-03	1.03E-01	6.52E-03	4.66E-03	1.03E-01	7.28E-01	7.34E-01	2	
189	16.264	16.500	4	1.49E+00	2.23E+01	2.09E+00	1.49E+00	2.23E+01	1.58E+02	1.60E+02	8	
190	16.032	16.870	4	1.79E+00	3.33E+01	2.51E+00	1.79E+00	3.33E+01	2.36E+02	2.38E+02	8	
191	16.288	16.648	4	9.86E-01	1.62E+01	1.38E+00	9.86E-01	1.62E+01	1.15E+02	1.16E+02	8	
192	16.005	16.725	4	2.94E+00	4.98E+01	4.12E+00	2.94E+00	4.98E+01	3.53E+02	3.57E+02	8	
193	16.112	16.912	4	2.14E-06	0.00E+00	3.00E-06	2.14E-06	0.00E+00	3.00E-06	5.99E-06	1	
194	16.252	16.789	4	3.59E+00	6.31E+01	5.03E+00	3.59E+00	6.31E+01	4.47E+02	4.52E+02	8	
197	15.916	14.875	6	3.07E-02	4.17E-01	4.30E-02	3.07E-02	4.17E-01	2.96E+00	3.00E+00	3	
199	15.987	14.868	2	7.30E-02	8.08E-01	1.02E-01	7.30E-02	8.08E-01	5.76E+00	5.86E+00	3	
201	15.916	14.708	2	2.93E-02	3.28E-01	4.10E-02	2.93E-02	3.28E-01	2.34E+00	2.38E+00	2	
202	16.294	14.763	6	5.77E-02	6.08E-01	8.08E-02	5.77E-02	6.08E-01	4.34E+00	4.42E+00	3	
209	16.134	16.486	1	1.33E-05	3.19E-02	1.86E-05	1.33E-05	3.19E-02	2.23E-01	2.23E-01	1	
212	16.315	15.061	2	6.77E-02	7.22E-01	9.48E-02	6.77E-02	7.22E-01	5.15E+00	5.24E+00	3	
213	16.228	14.881	2	7.74E-02	8.68E-01	1.08E-01	7.74E-02	8.68E-01	6.18E+00	6.29E+00	4	
215	16.269	18.118	2	1.33E+01	1.11E+03	1.86E+01	1.33E+01	1.11E+03	7.79E+03	7.81E+03	8	
Case 2: Protected 2 rounds at aimpoint (16.10, 18.25)												
1	16.058	16.697	2	0.00E+00	1.70E+00	0.00E+00	8.71E-07	4.87E+00	3.41E+01	3.41E+01	6	
6	16.013	17.002	2	4.25E-02	3.23E+01	5.95E-02	1.36E-01	9.23E+01	6.46E+02	6.46E+02	8	
16	16.187	16.658	4	0.00E+00	1.31E+00	0.00E+00	5.51E-07	3.75E+00	2.63E+01	2.63E+01	5	
19	16.065	16.500	4	0.00E+00	1.11E+00	0.00E+00	4.48E-07	3.20E+00	2.24E+01	2.24E+01	5	
22	16.263	17.082	8	3.45E-02	4.13E+01	4.83E-02	1.18E-01	1.18E+02	8.26E+02	8.26E+02	8	
48	15.950	15.453	6	0.00E+00	2.98E-01	0.00E+00	0.00E+00	1.37E+00	9.59E+00	9.59E+00	4	

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

50	15.975	14.694	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-01	3.96E+00	3.96E+00	3
51	15.970	15.328	6	0.00E+00	2.08E-01	0.00E+00	0.00E+00	1.42E+00	9.94E+00	9.94E+00	4
57	15.907	15.517	2	0.00E+00	1.34E-01	0.00E+00	0.00E+00	5.62E-01	3.93E+00	3.93E+00	3
58	15.921	14.547	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-01	1.74E+00	1.74E+00	2
59	16.339	14.858	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-01	2.53E+00	2.53E+00	2
60	16.396	14.734	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-02	1.18E-01	1.18E-01	1
62	16.143	14.987	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-01	2.17E+00	2.17E+00	2
63	16.376	15.063	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-01	7.14E-01	7.14E-01	2
77	16.101	16.650	2	0.00E+00	6.97E-08	0.00E+00	0.00E+00	1.99E-07	1.39E-06	1.39E-06	1
93	16.187	16.809	7	0.00E+00	1.24E+00	0.00E+00	7.50E-07	3.55E+00	2.49E+01	2.49E+01	5
99	16.079	16.804	3	0.00E+00	1.33E-01	0.00E+00	0.00E+00	3.79E-01	2.65E+00	2.65E+00	2
121	16.226	16.924	3	1.92E-02	1.74E+01	2.69E-02	6.19E-02	4.98E+01	3.49E+02	3.49E+02	8
129	16.188	16.473	40	0.00E+00	1.30E+00	0.00E+00	5.89E-07	3.75E+00	2.63E+01	2.63E+01	5
131	16.175	16.676	2	0.00E+00	2.82E-01	0.00E+00	0.00E+00	8.07E-01	5.65E+00	5.65E+00	3
132	16.015	16.530	5	5.58E-02	7.94E+00	7.81E-02	1.63E-01	2.27E+01	1.59E+02	1.59E+02	8
135	16.324	16.829	12	0.00E+00	2.42E-01	0.00E+00	6.47E-08	6.92E-01	4.84E+00	4.84E+00	3
154	15.921	15.357	16	0.00E+00	1.01E-01	0.00E+00	0.00E+00	6.91E-01	4.84E+00	4.84E+00	3
161	16.283	14.887	12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-01	5.33E+00	5.33E+00	3
163	15.853	14.526	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-03	3.09E-02	3.09E-02	1
166	16.178	15.100	4	0.00E+00	1.11E-02	0.00E+00	0.00E+00	6.15E-01	4.31E+00	4.31E+00	3
170	16.241	14.979	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-01	6.77E+00	6.77E+00	4
171	16.233	15.088	4	0.00E+00	1.88E-02	0.00E+00	0.00E+00	1.09E+00	7.63E+00	7.63E+00	4
172	16.219	14.747	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-01	4.28E+00	4.28E+00	3
174	16.174	14.734	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-01	2.60E+00	2.60E+00	2
176	16.349	14.675	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-01	1.47E+00	1.47E+00	2
178	16.157	14.868	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-01	2.46E+00	2.46E+00	2
185	16.181	17.037	4	0.00E+00	4.17E-01	0.00E+00	6.77E-07	1.19E+00	8.33E+00	8.33E+00	4
186	16.296	16.955	4	2.01E-03	4.54E+00	2.81E-03	6.87E-03	1.30E+01	9.10E+01	9.10E+01	8
187	16.163	16.951	4	0.00E+00	3.44E-02	0.00E+00	0.00E+00	9.84E-02	6.89E-01	6.89E-01	2
189	16.264	16.500	4	4.84E-02	7.44E+00	6.78E-02	1.42E-01	2.13E+01	1.49E+02	1.49E+02	8
190	16.032	16.870	4	1.75E-02	1.11E+01	2.45E-02	5.40E-02	3.17E+01	2.22E+02	2.22E+02	8
191	16.288	16.648	4	1.33E-02	5.40E+00	1.86E-02	3.96E-02	1.54E+01	1.08E+02	1.08E+02	8
192	16.005	16.725	4	7.43E-02	1.66E+01	1.04E-01	2.20E-01	4.74E+01	3.32E+02	3.32E+02	8
194	16.252	16.789	4	7.94E-02	2.10E+01	1.11E-01	2.38E-01	6.01E+01	4.21E+02	4.21E+02	8
197	15.916	14.875	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-01	2.72E+00	2.72E+00	2
199	15.987	14.868	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-01	5.26E+00	5.26E+00	3
201	15.916	14.708	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-01	2.14E+00	2.14E+00	2
202	16.294	14.763	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-01	3.96E+00	3.96E+00	3
209	16.134	16.486	1	0.00E+00	1.06E-02	0.00E+00	0.00E+00	3.04E-02	2.13E-01	2.13E-01	1
212	16.315	15.061	2	0.00E+00	2.90E-03	0.00E+00	0.00E+00	6.72E-01	4.70E+00	4.70E+00	3
213	16.228	14.881	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-01	5.65E+00	5.65E+00	3
215	16.269	18.118	2	4.31E-03	3.70E+02	6.03E-03	7.43E-02	1.06E+03	7.42E+03	7.42E+03	8

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				12 rounds at aimpoint (15.90, 19.60)							
1	16.058	16.697	2	1.12E+00	5.26E+00	1.57E+00	1.12E+00	5.26E+00	3.84E+01	4.00E+01	6
3	16.398	18.288	5	3.35E-06	0.00E+00	4.69E-06	3.35E-06	0.00E+00	4.69E-06	9.38E-06	1
6	16.013	17.002	2	1.38E+00	8.94E+00	1.93E+00	1.38E+00	8.94E+00	6.45E+01	6.64E+01	7
11	16.118	16.767	2	1.16E+00	5.83E+00	1.62E+00	1.16E+00	5.83E+00	4.24E+01	4.41E+01	6
16	16.187	16.658	4	1.06E+00	4.67E+00	1.48E+00	1.06E+00	4.67E+00	3.42E+01	3.57E+01	6
19	16.065	16.500	4	1.02E+00	4.15E+00	1.43E+00	1.02E+00	4.15E+00	3.05E+01	3.19E+01	6
20	15.732	18.428	7	1.08E+01	2.42E+02	1.51E+01	1.08E+01	2.42E+02	1.71E+03	1.72E+03	8
21	16.357	16.781	7	2.92E-02	3.62E-01	4.09E-02	2.92E-02	3.62E-01	2.57E+00	2.62E+00	2
22	16.263	17.082	8	9.37E-01	6.57E+00	1.31E+00	9.37E-01	6.57E+00	4.73E+01	4.86E+01	6
23	15.640	18.125	6	3.26E-01	5.55E+00	4.56E-01	3.26E-01	5.55E+00	3.93E+01	3.98E+01	6
24	15.675	18.447	4	4.77E+00	1.04E+02	6.68E+00	4.77E+00	1.04E+02	7.35E+02	7.41E+02	8
25	15.684	18.075	1	2.68E+00	4.38E+01	3.75E+00	2.68E+00	4.38E+01	3.10E+02	3.14E+02	8
48	15.950	15.453	6	3.89E-01	9.23E-01	5.45E-01	3.89E-01	9.23E-01	7.01E+00	7.55E+00	4
50	15.975	14.694	3	8.93E-02	4.60E-01	1.25E-01	8.93E-02	4.60E-01	3.35E+00	3.47E+00	3
51	15.970	15.328	6	3.46E-01	7.95E-01	4.84E-01	3.46E-01	7.95E-01	6.05E+00	6.53E+00	4

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

52	15.803	14.834	2	1.14E-01	4.94E-01	1.60E-01	1.14E-01	4.94E-01	3.62E+00	3.78E+00	3
53	15.716	14.523	2	4.34E-02	2.84E-01	6.08E-02	4.34E-02	2.84E-01	2.05E+00	2.11E+00	2
54	15.841	14.686	3	9.49E-02	4.60E-01	1.33E-01	9.49E-02	4.60E-01	3.35E+00	3.49E+00	3
55	15.746	15.374	2	3.60E-01	7.14E-01	5.04E-01	3.60E-01	7.14E-01	5.50E+00	6.01E+00	4
57	15.907	15.517	2	4.32E-01	9.79E-01	6.05E-01	4.32E-01	9.79E-01	7.46E+00	8.06E+00	4
58	15.921	14.547	3	6.23E-02	4.19E-01	8.72E-02	6.23E-02	4.19E-01	3.02E+00	3.11E+00	3
59	16.339	14.858	3	5.90E-03	4.58E-02	8.26E-03	5.90E-03	4.58E-02	3.29E-01	3.37E-01	2
60	16.396	14.734	3	4.78E-07	0.00E+00	6.69E-07	4.78E-07	0.00E+00	6.69E-07	1.34E-06	1
62	16.143	14.987	4	1.47E-01	4.65E-01	2.06E-01	1.47E-01	4.65E-01	3.46E+00	3.67E+00	3
63	16.376	15.063	2	2.87E-06	1.65E-02	4.02E-06	2.87E-06	1.65E-02	1.16E-01	1.16E-01	1
77	16.101	16.650	2	1.09E+00	4.86E+00	1.53E+00	1.09E+00	4.86E+00	3.55E+01	3.71E+01	6
83	15.850	15.349	2	3.47E-01	8.20E-01	4.86E-01	3.47E-01	8.20E-01	6.23E+00	6.71E+00	4
84	15.751	14.664	3	7.74E-02	3.80E-01	1.08E-01	7.74E-02	3.80E-01	2.77E+00	2.88E+00	2
85	15.813	15.577	2	4.62E-01	1.04E+00	6.47E-01	4.62E-01	1.04E+00	7.93E+00	8.57E+00	4
89	16.009	18.852	4	4.22E+01	1.18E+03	5.91E+01	4.22E+01	1.18E+03	8.32E+03	8.38E+03	8
90	15.914	18.998	4	6.80E+01	2.24E+03	9.52E+01	6.80E+01	2.24E+03	1.58E+04	1.59E+04	8
91	15.692	19.420	4	5.05E+01	4.26E+03	7.07E+01	5.05E+01	4.26E+03	2.99E+04	3.00E+04	8
93	16.187	16.809	7	1.16E+00	5.96E+00	1.62E+00	1.16E+00	5.96E+00	4.33E+01	4.50E+01	6
95	15.626	18.194	33	1.95E-01	3.52E+00	2.73E-01	1.95E-01	3.52E+00	2.49E+01	2.52E+01	5
97	15.607	18.398	28	3.33E-02	6.76E-01	4.66E-02	3.33E-02	6.76E-01	4.78E+00	4.83E+00	3
98	15.562	18.363	5	2.07E-05	0.00E+00	2.90E-05	2.07E-05	0.00E+00	2.90E-05	5.80E-05	1
99	16.079	16.804	3	1.19E+00	6.16E+00	1.67E+00	1.19E+00	6.16E+00	4.48E+01	4.65E+01	6
101	16.286	18.545	1	4.88E+00	1.22E+02	6.83E+00	4.88E+00	1.22E+02	8.61E+02	8.68E+02	8
103	16.329	18.484	2	4.96E-02	1.00E+00	6.94E-02	4.96E-02	1.00E+00	7.07E+00	7.14E+00	4
105	16.350	18.091	1	1.24E-04	0.00E+00	1.74E-04	1.24E-04	0.00E+00	1.74E-04	3.47E-04	1
106	16.332	18.240	1	1.04E-01	1.96E+00	1.46E-01	1.04E-01	1.96E+00	1.39E+01	1.40E+01	4
112	16.100	17.033	3	1.43E+00	9.48E+00	2.00E+00	1.43E+00	9.48E+00	6.84E+01	7.04E+01	7
121	16.226	16.924	3	1.11E+00	6.56E+00	1.55E+00	1.11E+00	6.56E+00	4.75E+01	4.90E+01	6
129	16.188	16.473	40	9.81E-01	3.79E+00	1.37E+00	9.81E-01	3.79E+00	2.79E+01	2.93E+01	5
131	16.175	16.676	2	1.08E+00	4.90E+00	1.51E+00	1.08E+00	4.90E+00	3.58E+01	3.73E+01	6
132	16.015	16.530	5	1.03E+00	4.27E+00	1.44E+00	1.03E+00	4.27E+00	3.13E+01	3.28E+01	6
133	15.733	18.328	9	8.34E+00	1.73E+02	1.17E+01	8.34E+00	1.73E+02	1.22E+03	1.23E+03	8
135	16.324	16.829	12	1.95E-01	1.34E+00	2.73E-01	1.95E-01	1.34E+00	9.65E+00	9.93E+00	4
136	16.374	16.990	4	1.86E-02	2.55E-01	2.60E-02	1.86E-02	2.55E-01	1.81E+00	1.84E+00	2
137	15.561	17.979	6	3.19E-05	2.77E-03	4.47E-05	3.19E-05	2.77E-03	1.94E-02	1.95E-02	1
138	15.585	18.218	2	8.20E-05	0.00E+00	1.15E-04	8.20E-05	0.00E+00	1.15E-04	2.30E-04	1
140	15.641	18.402	24	1.92E-01	3.92E+00	2.69E-01	1.92E-01	3.92E+00	2.77E+01	2.80E+01	5
141	15.601	18.327	10	5.81E-03	1.10E-01	8.13E-03	5.81E-03	1.10E-01	7.78E-01	7.86E-01	2
143	15.719	18.229	16	5.90E+00	1.11E+02	8.26E+00	5.90E+00	1.11E+02	7.85E+02	7.94E+02	8
144	15.555	18.123	4	1.30E-05	0.00E+00	1.82E-05	1.30E-05	0.00E+00	1.82E-05	3.64E-05	1
154	15.921	15.357	16	3.50E-01	8.18E-01	4.90E-01	3.50E-01	8.18E-01	6.22E+00	6.71E+00	4
160	15.588	14.773	2	4.54E-06	6.71E-02	6.36E-06	4.54E-06	6.71E-02	4.70E-01	4.70E-01	2
161	16.283	14.887	12	5.66E-02	2.41E-01	7.92E-02	5.66E-02	2.41E-01	1.77E+00	1.85E+00	2
162	15.618	14.622	2	6.41E-03	7.33E-02	8.97E-03	6.41E-03	7.33E-02	5.22E-01	5.31E-01	2
163	15.853	14.526	3	7.02E-02	4.24E-01	9.83E-02	7.02E-02	4.24E-01	3.07E+00	3.16E+00	3
164	15.667	14.794	3	3.08E-02	2.37E-01	4.31E-02	3.08E-02	2.37E-01	1.70E+00	1.75E+00	2
165	15.824	14.794	3	1.07E-01	4.85E-01	1.50E-01	1.07E-01	4.85E-01	3.54E+00	3.69E+00	3
166	16.178	15.100	4	2.22E-01	5.35E-01	3.11E-01	2.22E-01	5.35E-01	4.06E+00	4.37E+00	3
167	15.684	15.464	2	2.34E-01	5.05E-01	3.28E-01	2.34E-01	5.05E-01	3.86E+00	4.19E+00	3
168	15.780	15.281	2	3.19E-01	7.04E-01	4.47E-01	3.19E-01	7.04E-01	5.37E+00	5.82E+00	3
169	15.735	15.486	2	3.76E-01	7.61E-01	5.26E-01	3.76E-01	7.61E-01	5.85E+00	6.38E+00	4
170	16.241	14.979	9	1.29E-01	3.29E-01	1.81E-01	1.29E-01	3.29E-01	2.48E+00	2.66E+00	2
171	16.233	15.088	4	1.79E-01	4.14E-01	2.51E-01	1.79E-01	4.14E-01	3.15E+00	3.40E+00	3
172	16.219	14.747	1	7.70E-02	3.63E-01	1.08E-01	7.70E-02	3.63E-01	2.65E+00	2.76E+00	2
174	16.174	14.734	1	8.98E-02	4.26E-01	1.26E-01	8.98E-02	4.26E-01	3.11E+00	3.23E+00	3
176	16.349	14.675	1	3.61E-04	3.72E-03	5.05E-04	3.61E-04	3.72E-03	2.65E-02	2.71E-02	1
178	16.157	14.868	1	1.23E-01	4.53E-01	1.72E-01	1.23E-01	4.53E-01	3.34E+00	3.52E+00	3
185	16.181	17.037	4	1.42E+00	9.36E+00	1.99E+00	1.42E+00	9.36E+00	6.75E+01	6.95E+01	7
186	16.296	16.955	4	4.15E-01	2.96E+00	5.81E-01	4.15E-01	2.96E+00	2.13E+01	2.19E+01	5
187	16.163	16.951	4	1.35E+00	8.21E+00	1.89E+00	1.35E+00	8.21E+00	5.94E+01	6.13E+01	7
189	16.264	16.500	4	6.15E-01	2.43E+00	8.61E-01	6.15E-01	2.43E+00	1.79E+01	1.87E+01	5
190	16.032	16.870	4	1.26E+00	7.11E+00	1.76E+00	1.26E+00	7.11E+00	5.15E+01	5.33E+01	7
191	16.288	16.648	4	4.30E-01	2.06E+00	6.02E-01	4.30E-01	2.06E+00	1.50E+01	1.56E+01	5
192	16.005	16.725	4	1.13E+00	5.52E+00	1.58E+00	1.13E+00	5.52E+00	4.02E+01	4.18E+01	6
193	16.112	16.912	4	1.30E+00	7.70E+00	1.82E+00	1.30E+00	7.70E+00	5.57E+01	5.75E+01	7
194	16.252	16.789	4	8.33E-01	4.22E+00	1.17E+00	8.33E-01	4.22E+00	3.07E+01	3.19E+01	6
197	15.916	14.875	6	1.37E-01	4.99E-01	1.92E-01	1.37E-01	4.99E-01	3.68E+00	3.88E+00	3
199	15.987	14.868	2	1.33E-01	5.03E-01	1.86E-01	1.33E-01	5.03E-01	3.71E+00	3.89E+00	3

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

201	15.916	14.708	2	8.26E-02	4.64E-01	1.16E-01	8.26E-02	4.64E-01	3.36E+00	3.48E+00	3
202	16.294	14.763	6	2.54E-02	2.13E-01	3.56E-02	2.54E-02	2.13E-01	1.53E+00	1.56E+00	2
203	15.677	18.330	1	3.77E+00	7.48E+01	5.28E+00	3.77E+00	7.48E+01	5.29E+02	5.34E+02	8
209	16.134	16.486	1	1.02E+00	4.10E+00	1.43E+00	1.02E+00	4.10E+00	3.01E+01	3.16E+01	6
212	16.315	15.061	2	4.13E-02	1.64E-01	5.78E-02	4.13E-02	1.64E-01	1.21E+00	1.26E+00	2
213	16.228	14.881	2	1.10E-01	3.57E-01	1.54E-01	1.10E-01	3.57E-01	2.65E+00	2.81E+00	2
214	15.841	15.478	1	3.98E-01	9.49E-01	5.57E-01	3.98E-01	9.49E-01	7.20E+00	7.76E+00	4
215	16.269	18.118	2	3.37E+00	6.07E+01	4.72E+00	3.37E+00	6.07E+01	4.30E+02	4.34E+02	8
221	16.393	18.433	10	6.94E-06	0.00E+00	9.72E-06	6.94E-06	0.00E+00	9.72E-06	1.94E-05	1
223	16.300	18.359	2	2.03E-01	3.98E+00	2.84E-01	2.03E-01	3.98E+00	2.81E+01	2.84E+01	5
226	16.382	18.616	1	3.94E-06	0.00E+00	5.52E-06	3.94E-06	0.00E+00	5.52E-06	1.10E-05	1
228	15.701	15.607	2	3.48E-01	6.93E-01	4.87E-01	3.48E-01	6.93E-01	5.34E+00	5.83E+00	3
232	15.630	14.497	6	1.07E-02	1.02E-01	1.50E-02	1.07E-02	1.02E-01	7.29E-01	7.44E-01	2
233	15.692	14.599	3	3.28E-02	2.57E-01	4.59E-02	3.28E-02	2.57E-01	1.84E+00	1.89E+00	2
234	15.772	14.883	8	1.33E-01	4.43E-01	1.86E-01	1.33E-01	4.43E-01	3.29E+00	3.47E+00	3
236	15.710	14.733	7	5.82E-02	3.19E-01	8.15E-02	5.82E-02	3.19E-01	2.31E+00	2.40E+00	2
237	15.776	14.522	2	5.65E-02	3.68E-01	7.91E-02	5.65E-02	3.68E-01	2.66E+00	2.73E+00	2
238	15.612	17.946	2	1.13E-01	1.71E+00	1.58E-01	1.13E-01	1.71E+00	1.21E+01	1.23E+01	4
Case 2: Protected 12 rounds at aimpoint (15.90, 19.60)											
1	16.058	16.697	2	2.11E-01	9.87E-01	2.95E-01	6.49E-01	4.96E+00	3.56E+01	3.59E+01	6
6	16.013	17.002	2	2.30E-01	2.79E+00	3.22E-01	6.57E-01	8.51E+00	6.05E+01	6.08E+01	7
11	16.118	16.767	2	2.19E-01	1.36E+00	3.07E-01	6.46E-01	5.52E+00	3.95E+01	3.99E+01	6
16	16.187	16.658	4	2.02E-01	7.45E-01	2.83E-01	6.38E-01	4.39E+00	3.16E+01	3.19E+01	6
19	16.065	16.500	4	1.66E-01	2.54E-01	2.32E-01	6.16E-01	3.87E+00	2.80E+01	2.82E+01	5
20	15.732	18.428	7	7.51E-02	8.06E+01	1.05E-01	2.56E-01	2.30E+02	1.61E+03	1.61E+03	8
21	16.357	16.781	7	0.00E+00	9.43E-02	0.00E+00	0.00E+00	3.43E-01	2.40E+00	2.40E+00	2
22	16.263	17.082	8	1.50E-01	2.09E+00	2.10E-01	4.30E-01	6.26E+00	4.44E+01	4.46E+01	6
23	15.640	18.125	6	5.11E-03	1.85E+00	7.15E-03	1.46E-02	5.29E+00	3.71E+01	3.71E+01	6
24	15.675	18.447	4	4.14E-02	3.45E+01	5.80E-02	1.33E-01	9.88E+01	6.92E+02	6.92E+02	8
25	15.684	18.075	1	9.39E-02	1.46E+01	1.31E-01	2.75E-01	4.17E+01	2.92E+02	2.92E+02	8
48	15.950	15.453	6	0.00E+00	0.00E+00	0.00E+00	2.82E-01	8.59E-01	6.41E+00	6.41E+00	4
50	15.975	14.694	3	0.00E+00	0.00E+00	0.00E+00	1.66E-02	4.28E-01	3.02E+00	3.02E+00	3
51	15.970	15.328	6	0.00E+00	0.00E+00	0.00E+00	2.44E-01	7.40E-01	5.52E+00	5.52E+00	3
52	15.803	14.834	2	0.00E+00	0.00E+00	0.00E+00	3.94E-02	4.59E-01	3.27E+00	3.27E+00	3
53	15.716	14.523	2	0.00E+00	0.00E+00	0.00E+00	1.87E-03	2.64E-01	1.85E+00	1.85E+00	2
54	15.841	14.686	3	0.00E+00	0.00E+00	0.00E+00	2.34E-02	4.28E-01	3.03E+00	3.03E+00	3
55	15.746	15.374	2	0.00E+00	0.00E+00	0.00E+00	2.56E-01	6.64E-01	5.01E+00	5.01E+00	3
57	15.907	15.517	2	0.00E+00	0.00E+00	0.00E+00	3.17E-01	9.10E-01	6.81E+00	6.81E+00	4
58	15.921	14.547	3	0.00E+00	0.00E+00	0.00E+00	2.93E-03	3.90E-01	2.73E+00	2.73E+00	2
59	16.339	14.858	3	0.00E+00	0.00E+00	0.00E+00	1.84E-03	4.26E-02	3.01E-01	3.01E-01	2
62	16.143	14.987	4	0.00E+00	0.00E+00	0.00E+00	8.36E-02	4.32E-01	3.14E+00	3.14E+00	3
63	16.376	15.063	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-02	1.07E-01	1.07E-01	1
77	16.101	16.650	2	2.03E-01	7.24E-01	2.84E-01	6.42E-01	4.57E+00	3.29E+01	3.32E+01	6
83	15.850	15.349	2	0.00E+00	0.00E+00	0.00E+00	2.46E-01	7.63E-01	5.69E+00	5.69E+00	3
84	15.751	14.664	3	0.00E+00	0.00E+00	0.00E+00	2.19E-02	3.54E-01	2.51E+00	2.51E+00	2
85	15.813	15.577	2	0.00E+00	0.00E+00	0.00E+00	3.40E-01	9.70E-01	7.27E+00	7.27E+00	4
89	16.009	18.852	4	2.93E-02	3.94E+02	4.10E-02	3.51E-01	1.13E+03	7.91E+03	7.91E+03	8
90	15.914	18.998	4	4.01E-02	7.46E+02	5.61E-02	6.65E-01	2.13E+03	1.49E+04	1.49E+04	8
91	15.692	19.420	4	1.99E-02	1.42E+03	2.79E-02	2.98E-01	4.06E+03	2.84E+04	2.84E+04	8
93	16.187	16.809	7	2.23E-01	1.54E+00	3.12E-01	6.45E-01	5.65E+00	4.05E+01	4.08E+01	6
95	15.626	18.194	33	1.92E-03	1.17E+00	2.69E-03	5.50E-03	3.35E+00	2.35E+01	2.35E+01	5
97	15.607	18.398	28	4.85E-06	2.25E-01	6.79E-06	1.47E-05	6.45E-01	4.52E+00	4.52E+00	3
99	16.079	16.804	3	2.26E-01	1.56E+00	3.16E-01	6.52E-01	5.84E+00	4.18E+01	4.21E+01	6
101	16.286	18.545	1	1.30E-02	4.06E+01	1.82E-02	6.11E-02	1.16E+02	8.12E+02	8.12E+02	8
103	16.329	18.484	2	3.60E-08	3.33E-01	5.04E-08	8.43E-06	9.53E-01	6.67E+00	6.67E+00	4
106	16.332	18.240	1	0.00E+00	6.52E-01	0.00E+00	2.54E-06	1.86E+00	1.30E+01	1.30E+01	4
112	16.100	17.033	3	2.31E-01	2.97E+00	3.23E-01	6.60E-01	9.02E+00	6.41E+01	6.44E+01	7
121	16.226	16.924	3	2.00E-01	1.95E+00	2.80E-01	5.74E-01	6.24E+00	4.45E+01	4.48E+01	6
129	16.188	16.473	40	1.60E-01	1.91E-01	2.24E-01	6.12E-01	3.54E+00	2.56E+01	2.59E+01	5
131	16.175	16.676	2	2.05E-01	8.51E-01	2.87E-01	6.43E-01	4.62E+00	3.32E+01	3.35E+01	6
132	16.015	16.530	5	1.77E-01	3.18E-01	2.48E-01	6.22E-01	3.99E+00	2.88E+01	2.90E+01	5
133	15.733	18.328	9	9.25E-02	5.78E+01	1.30E-01	2.92E-01	1.65E+02	1.16E+03	1.16E+03	8
135	16.324	16.829	12	2.85E-02	3.67E-01	3.99E-02	8.16E-02	1.27E+00	9.00E+00	9.04E+00	4
136	16.374	16.990	4	0.00E+00	7.91E-02	0.00E+00	0.00E+00	2.42E-01	1.69E+00	1.69E+00	2
137	15.561	17.979	6	0.00E+00	9.24E-04	0.00E+00	0.00E+00	2.64E-03	1.85E-02	1.85E-02	1
140	15.641	18.402	24	0.00E+00	1.31E+00	0.00E+00	4.94E-06	3.74E+00	2.62E+01	2.62E+01	5
141	15.601	18.327	10	2.53E-05	3.68E-02	3.54E-05	7.25E-05	1.05E-01	7.35E-01	7.35E-01	2
143	15.719	18.229	16	1.12E-01	3.71E+01	1.57E-01	3.36E-01	1.06E+02	7.42E+02	7.43E+02	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

154	15.921	15.357	16	0.00E+00	0.00E+00	0.00E+00	2.51E-01	7.61E-01	5.68E+00	5.68E+00	3
160	15.588	14.773	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-02	4.37E-01	4.37E-01	2
161	16.283	14.887	12	0.00E+00	0.00E+00	0.00E+00	3.04E-02	2.24E-01	1.61E+00	1.61E+00	2
162	15.618	14.622	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-02	4.77E-01	4.77E-01	2
163	15.853	14.526	3	0.00E+00	0.00E+00	0.00E+00	5.62E-03	3.94E-01	2.77E+00	2.77E+00	2
164	15.667	14.794	3	0.00E+00	0.00E+00	0.00E+00	6.41E-03	2.20E-01	1.55E+00	1.55E+00	2
165	15.824	14.794	3	0.00E+00	0.00E+00	0.00E+00	3.30E-02	4.51E-01	3.20E+00	3.20E+00	3
166	16.178	15.100	4	0.00E+00	0.00E+00	0.00E+00	1.45E-01	4.98E-01	3.69E+00	3.69E+00	3
167	15.684	15.464	2	0.00E+00	0.00E+00	0.00E+00	1.70E-01	4.70E-01	3.53E+00	3.53E+00	3
168	15.780	15.281	2	0.00E+00	0.00E+00	0.00E+00	2.25E-01	6.55E-01	4.90E+00	4.90E+00	3
169	15.735	15.486	2	0.00E+00	0.00E+00	0.00E+00	2.72E-01	7.08E-01	5.34E+00	5.34E+00	3
170	16.241	14.979	9	0.00E+00	0.00E+00	0.00E+00	8.32E-02	3.06E-01	2.26E+00	2.26E+00	2
171	16.233	15.088	4	0.00E+00	0.00E+00	0.00E+00	1.20E-01	3.85E-01	2.86E+00	2.86E+00	2
172	16.219	14.747	1	0.00E+00	0.00E+00	0.00E+00	2.81E-02	3.38E-01	2.41E+00	2.41E+00	2
174	16.174	14.734	1	0.00E+00	0.00E+00	0.00E+00	2.50E-02	3.97E-01	2.81E+00	2.81E+00	2
176	16.349	14.675	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-03	2.42E-02	2.42E-02	1
178	16.157	14.868	1	0.00E+00	0.00E+00	0.00E+00	5.50E-02	4.21E-01	3.02E+00	3.02E+00	3
185	16.181	17.037	4	2.34E-01	2.94E+00	3.28E-01	6.70E-01	8.91E+00	6.33E+01	6.36E+01	7
186	16.296	16.955	4	6.30E-02	9.02E-01	8.82E-02	1.80E-01	2.81E+00	1.99E+01	2.00E+01	5
187	16.163	16.951	4	2.34E-01	2.47E+00	3.28E-01	6.69E-01	7.81E+00	5.56E+01	5.59E+01	7
189	16.264	16.500	4	1.04E-01	1.65E-01	1.46E-01	3.78E-01	2.27E+00	1.64E+01	1.66E+01	5
190	16.032	16.870	4	2.30E-01	1.98E+00	3.22E-01	6.61E-01	6.75E+00	4.82E+01	4.85E+01	6
191	16.288	16.648	4	7.70E-02	3.30E-01	1.08E-01	2.40E-01	1.94E+00	1.39E+01	1.40E+01	4
192	16.005	16.725	4	2.13E-01	1.14E+00	2.98E-01	6.43E-01	5.21E+00	3.74E+01	3.77E+01	6
193	16.112	16.912	4	2.28E-01	2.23E+00	3.19E-01	6.54E-01	7.32E+00	5.22E+01	5.25E+01	7
194	16.252	16.789	4	1.66E-01	1.08E+00	2.32E-01	4.77E-01	4.00E+00	2.87E+01	2.89E+01	5
197	15.916	14.875	6	0.00E+00	0.00E+00	0.00E+00	6.06E-02	4.64E-01	3.33E+00	3.33E+00	3
199	15.987	14.868	2	0.00E+00	0.00E+00	0.00E+00	5.73E-02	4.68E-01	3.36E+00	3.36E+00	3
201	15.916	14.708	2	0.00E+00	0.00E+00	0.00E+00	1.55E-02	4.31E-01	3.04E+00	3.04E+00	3
202	16.294	14.763	6	0.00E+00	0.00E+00	0.00E+00	5.08E-03	1.98E-01	1.39E+00	1.39E+00	2
203	15.677	18.330	1	5.55E-02	2.49E+01	7.77E-02	1.68E-01	7.13E+01	4.99E+02	4.99E+02	8
209	16.134	16.486	1	1.64E-01	2.24E-01	2.30E-01	6.17E-01	3.83E+00	2.77E+01	2.79E+01	5
212	16.315	15.061	2	0.00E+00	0.00E+00	0.00E+00	2.68E-02	1.52E-01	1.10E+00	1.10E+00	2
213	16.228	14.881	2	0.00E+00	0.00E+00	0.00E+00	6.13E-02	3.32E-01	2.41E+00	2.41E+00	2
214	15.841	15.478	1	0.00E+00	0.00E+00	0.00E+00	2.89E-01	8.83E-01	6.59E+00	6.59E+00	4
215	16.269	18.118	2	7.53E-02	2.02E+01	1.05E-01	2.26E-01	5.78E+01	4.05E+02	4.05E+02	8
223	16.300	18.359	2	5.88E-07	1.33E+00	8.23E-07	1.25E-05	3.80E+00	2.66E+01	2.66E+01	5
228	15.701	15.607	2	0.00E+00	0.00E+00	0.00E+00	2.57E-01	6.44E-01	4.87E+00	4.87E+00	3
232	15.630	14.497	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-02	6.64E-01	6.64E-01	2
233	15.692	14.599	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-01	1.67E+00	1.67E+00	2
234	15.772	14.883	8	0.00E+00	0.00E+00	0.00E+00	6.66E-02	4.12E-01	2.98E+00	2.98E+00	2
236	15.710	14.733	7	0.00E+00	0.00E+00	0.00E+00	1.75E-02	2.96E-01	2.10E+00	2.10E+00	2
237	15.776	14.522	2	0.00E+00	0.00E+00	0.00E+00	2.78E-03	3.42E-01	2.40E+00	2.40E+00	2
238	15.612	17.946	2	3.50E-03	5.68E-01	4.90E-03	1.00E-02	1.63E+00	1.14E+01	1.14E+01	4

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				24 rounds at aimpoint (15.90, 19.45)							
1	16.058	16.697	2	2.98E+00	1.67E+01	4.17E+00	2.98E+00	1.67E+01	1.21E+02	1.25E+02	8
3	16.398	18.288	5	2.23E-06	0.00E+00	3.12E-06	2.23E-06	0.00E+00	3.12E-06	6.24E-06	1
6	16.013	17.002	2	3.60E+00	2.77E+01	5.04E+00	3.60E+00	2.77E+01	1.99E+02	2.04E+02	8
11	16.118	16.767	2	3.08E+00	1.89E+01	4.31E+00	3.08E+00	1.89E+01	1.37E+02	1.41E+02	8
16	16.187	16.658	4	2.80E+00	1.47E+01	3.92E+00	2.80E+00	1.47E+01	1.07E+02	1.11E+02	8
19	16.065	16.500	4	2.64E+00	1.17E+01	3.70E+00	2.64E+00	1.17E+01	8.56E+01	8.93E+01	8
20	15.732	18.428	7	5.75E+01	1.38E+03	8.05E+01	5.75E+01	1.38E+03	9.74E+03	9.82E+03	8
21	16.357	16.781	7	6.51E-02	8.18E-01	9.11E-02	6.51E-02	8.18E-01	5.82E+00	5.91E+00	3
22	16.263	17.082	8	2.48E+00	2.10E+01	3.47E+00	2.48E+00	2.10E+01	1.50E+02	1.54E+02	8
23	15.640	18.125	6	4.68E-01	8.86E+00	6.55E-01	4.68E-01	8.86E+00	6.27E+01	6.33E+01	7
24	15.675	18.447	4	2.31E+01	5.42E+02	3.23E+01	2.31E+01	5.42E+02	3.83E+03	3.86E+03	8
25	15.684	18.075	1	9.35E+00	1.87E+02	1.31E+01	9.35E+00	1.87E+02	1.32E+03	1.34E+03	8
48	15.950	15.453	6	1.85E+00	2.57E+00	2.59E+00	1.85E+00	2.57E+00	2.06E+01	2.32E+01	5

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

50	15.975	14.694	3	1.43E+00	1.12E+00	2.00E+00	1.43E+00	1.12E+00	9.84E+00	1.18E+01	4
51	15.970	15.328	6	1.77E+00	2.19E+00	2.48E+00	1.77E+00	2.19E+00	1.78E+01	2.03E+01	5
52	15.803	14.834	2	1.51E+00	1.23E+00	2.11E+00	1.51E+00	1.23E+00	1.07E+01	1.28E+01	4
53	15.716	14.523	2	9.42E-01	7.19E-01	1.32E+00	9.42E-01	7.19E-01	6.35E+00	7.67E+00	4
54	15.841	14.686	3	1.41E+00	1.08E+00	1.97E+00	1.41E+00	1.08E+00	9.53E+00	1.15E+01	4
55	15.746	15.374	2	1.60E+00	1.98E+00	2.24E+00	1.60E+00	1.98E+00	1.61E+01	1.83E+01	5
57	15.907	15.517	2	1.91E+00	2.97E+00	2.67E+00	1.91E+00	2.97E+00	2.35E+01	2.61E+01	5
58	15.921	14.547	3	1.33E+00	1.05E+00	1.86E+00	1.33E+00	1.05E+00	9.21E+00	1.11E+01	4
59	16.339	14.858	3	2.46E-01	2.61E-01	3.44E-01	2.46E-01	2.61E-01	2.17E+00	2.52E+00	2
60	16.396	14.734	3	1.30E-02	1.48E-02	1.82E-02	1.30E-02	1.48E-02	1.22E-01	1.40E-01	1
62	16.143	14.987	4	1.59E+00	1.47E+00	2.23E+00	1.59E+00	1.47E+00	1.25E+01	1.47E+01	4
63	16.376	15.063	2	7.34E-02	1.12E-01	1.03E-01	7.34E-02	1.12E-01	8.87E-01	9.90E-01	2
77	16.101	16.650	2	2.83E+00	1.51E+01	3.96E+00	2.83E+00	1.51E+01	1.10E+02	1.14E+02	8
83	15.850	15.349	2	1.79E+00	2.25E+00	2.51E+00	1.79E+00	2.25E+00	1.83E+01	2.08E+01	5
84	15.751	14.664	3	1.25E+00	8.82E-01	1.75E+00	1.25E+00	8.82E-01	7.92E+00	9.67E+00	4
85	15.813	15.577	2	1.96E+00	3.29E+00	2.74E+00	1.96E+00	3.29E+00	2.58E+01	2.85E+01	5
89	16.009	18.852	4	1.59E+02	6.76E+03	2.23E+02	1.59E+02	6.76E+03	4.75E+04	4.78E+04	8
90	15.914	18.998	4	1.46E+02	8.59E+03	2.04E+02	1.46E+02	8.59E+03	6.03E+04	6.05E+04	8
91	15.692	19.420	4	8.42E+00	7.11E+02	1.18E+01	8.42E+00	7.11E+02	4.99E+03	5.00E+03	8
93	16.187	16.809	7	3.11E+00	1.95E+01	4.35E+00	3.11E+00	1.95E+01	1.41E+02	1.45E+02	8
95	15.626	18.194	33	2.47E-01	4.83E+00	3.46E-01	2.47E-01	4.83E+00	3.42E+01	3.45E+01	6
97	15.607	18.398	28	2.63E-02	5.46E-01	3.68E-02	2.63E-02	5.46E-01	3.86E+00	3.90E+00	3
98	15.562	18.363	5	1.77E-05	0.00E+00	2.48E-05	1.77E-05	0.00E+00	2.48E-05	4.96E-05	1
99	16.079	16.804	3	3.17E+00	2.01E+01	4.44E+00	3.17E+00	2.01E+01	1.45E+02	1.50E+02	8
101	16.286	18.545	1	2.71E+01	8.12E+02	3.79E+01	2.71E+01	8.12E+02	5.72E+03	5.76E+03	8
103	16.329	18.484	2	5.32E-02	3.00E-01	7.45E-02	5.32E-02	3.00E-01	2.17E+00	2.25E+00	2
105	16.350	18.091	1	1.42E-04	0.00E+00	1.99E-04	1.42E-04	0.00E+00	1.99E-04	3.98E-04	1
106	16.332	18.240	1	8.10E-02	1.65E+00	1.13E-01	8.10E-02	1.65E+00	1.17E+01	1.18E+01	4
112	16.100	17.033	3	3.61E+00	2.86E+01	5.05E+00	3.61E+00	2.86E+01	2.05E+02	2.10E+02	8
121	16.226	16.924	3	2.96E+00	2.10E+01	4.14E+00	2.96E+00	2.10E+01	1.51E+02	1.55E+02	8
129	16.188	16.473	40	2.51E+00	1.05E+01	3.51E+00	2.51E+00	1.05E+01	7.70E+01	8.05E+01	8
131	16.175	16.676	2	2.87E+00	1.55E+01	4.02E+00	2.87E+00	1.55E+01	1.13E+02	1.17E+02	8
132	16.015	16.530	5	2.67E+00	1.24E+01	3.74E+00	2.67E+00	1.24E+01	9.05E+01	9.43E+01	8
133	15.733	18.328	9	4.19E+01	9.72E+02	5.87E+01	4.19E+01	9.72E+02	6.86E+03	6.92E+03	8
135	16.324	16.829	12	4.95E-01	3.81E+00	6.93E-01	4.95E-01	3.81E+00	2.74E+01	2.81E+01	5
136	16.374	16.990	4	3.08E-02	4.49E-01	4.31E-02	3.08E-02	4.49E-01	3.19E+00	3.23E+00	3
137	15.561	17.979	6	5.48E-05	0.00E+00	7.67E-05	5.48E-05	0.00E+00	7.67E-05	1.53E-04	1
138	15.585	18.218	2	1.00E-04	0.00E+00	1.40E-04	1.00E-04	0.00E+00	1.40E-04	2.80E-04	1
140	15.641	18.402	24	1.49E-01	3.11E+00	2.09E-01	1.49E-01	3.11E+00	2.20E+01	2.22E+01	5
141	15.601	18.327	10	5.73E-03	1.16E-01	8.02E-03	5.73E-03	1.16E-01	8.20E-01	8.28E-01	2
143	15.719	18.229	16	2.48E+01	5.45E+02	3.47E+01	2.48E+01	5.45E+02	3.85E+03	3.88E+03	8
144	15.555	18.123	4	1.92E-05	0.00E+00	2.69E-05	1.92E-05	0.00E+00	2.69E-05	5.38E-05	1
154	15.921	15.357	16	1.79E+00	2.27E+00	2.51E+00	1.79E+00	2.27E+00	1.84E+01	2.09E+01	5
160	15.588	14.773	2	1.15E-01	1.35E-01	1.61E-01	1.15E-01	1.35E-01	1.11E+00	1.27E+00	2
161	16.283	14.887	12	7.05E-01	6.18E-01	9.87E-01	7.05E-01	6.18E-01	5.31E+00	6.30E+00	4
162	15.618	14.622	2	2.64E-01	2.69E-01	3.70E-01	2.64E-01	2.69E-01	2.25E+00	2.62E+00	2
163	15.853	14.526	3	1.31E+00	1.04E+00	1.83E+00	1.31E+00	1.04E+00	9.11E+00	1.09E+01	4
164	15.667	14.794	3	6.70E-01	5.51E-01	9.38E-01	6.70E-01	5.51E-01	4.80E+00	5.73E+00	3
165	15.824	14.794	3	1.49E+00	1.19E+00	2.09E+00	1.49E+00	1.19E+00	1.04E+01	1.25E+01	4
166	16.178	15.100	4	1.54E+00	1.56E+00	2.16E+00	1.54E+00	1.56E+00	1.31E+01	1.52E+01	5
167	15.684	15.464	2	1.03E+00	1.43E+00	1.44E+00	1.03E+00	1.43E+00	1.15E+01	1.29E+01	4
168	15.780	15.281	2	1.69E+00	1.92E+00	2.37E+00	1.69E+00	1.92E+00	1.58E+01	1.82E+01	5
169	15.735	15.486	2	1.57E+00	2.21E+00	2.20E+00	1.57E+00	2.21E+00	1.77E+01	1.99E+01	5
170	16.241	14.979	9	1.11E+00	1.01E+00	1.55E+00	1.11E+00	1.01E+00	8.62E+00	1.02E+01	4
171	16.233	15.088	4	1.21E+00	1.21E+00	1.69E+00	1.21E+00	1.21E+00	1.02E+01	1.19E+01	4
172	16.219	14.747	1	1.16E+00	9.08E-01	1.62E+00	1.16E+00	9.08E-01	7.98E+00	9.60E+00	4
173	16.407	14.834	1	5.13E-06	0.00E+00	7.18E-06	5.13E-06	0.00E+00	7.18E-06	1.44E-05	1
174	16.174	14.734	1	1.37E+00	1.05E+00	1.92E+00	1.37E+00	1.05E+00	9.27E+00	1.12E+01	4
175	16.414	15.004	1	4.30E-06	0.00E+00	6.02E-06	4.30E-06	0.00E+00	6.02E-06	1.20E-05	1
176	16.349	14.675	1	1.70E-01	1.84E-01	2.38E-01	1.70E-01	1.84E-01	1.53E+00	1.76E+00	2
178	16.157	14.868	1	1.51E+00	1.23E+00	2.11E+00	1.51E+00	1.23E+00	1.07E+01	1.28E+01	4
185	16.181	17.037	4	3.65E+00	2.87E+01	5.11E+00	3.65E+00	2.87E+01	2.06E+02	2.11E+02	8
186	16.296	16.955	4	1.06E+00	8.53E+00	1.48E+00	1.06E+00	8.53E+00	6.12E+01	6.27E+01	7
187	16.163	16.951	4	3.52E+00	2.58E+01	4.93E+00	3.52E+00	2.58E+01	1.86E+02	1.90E+02	8
189	16.264	16.500	4	1.58E+00	7.09E+00	2.21E+00	1.58E+00	7.09E+00	5.18E+01	5.41E+01	7
190	16.032	16.870	4	3.33E+00	2.24E+01	4.66E+00	3.33E+00	2.24E+01	1.61E+02	1.66E+02	8
191	16.288	16.648	4	1.12E+00	6.37E+00	1.57E+00	1.12E+00	6.37E+00	4.62E+01	4.77E+01	6
192	16.005	16.725	4	2.97E+00	1.74E+01	4.16E+00	2.97E+00	1.74E+01	1.26E+02	1.30E+02	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

193	16.112	16.912	4	3.38E+00	2.40E+01	4.73E+00	3.38E+00	2.40E+01	1.73E+02	1.77E+02	8
194	16.252	16.789	4	2.29E+00	1.41E+01	3.21E+00	2.29E+00	1.41E+01	1.02E+02	1.05E+02	8
197	15.916	14.875	6	1.55E+00	1.30E+00	2.17E+00	1.55E+00	1.30E+00	1.13E+01	1.34E+01	4
199	15.987	14.868	2	1.55E+00	1.29E+00	2.17E+00	1.55E+00	1.29E+00	1.12E+01	1.34E+01	4
201	15.916	14.708	2	1.44E+00	1.14E+00	2.02E+00	1.44E+00	1.14E+00	1.00E+01	1.20E+01	4
202	16.294	14.763	6	5.78E-01	4.96E-01	8.09E-01	5.78E-01	4.96E-01	4.28E+00	5.09E+00	3
203	15.677	18.330	1	1.71E+01	3.95E+02	2.39E+01	1.71E+01	3.95E+02	2.79E+03	2.81E+03	8
209	16.134	16.486	1	2.62E+00	1.14E+01	3.67E+00	2.62E+00	1.14E+01	8.35E+01	8.71E+01	8
212	16.315	15.061	2	4.48E-01	4.88E-01	6.27E-01	4.48E-01	4.88E-01	4.04E+00	4.67E+00	3
213	16.228	14.881	2	1.17E+00	9.76E-01	1.64E+00	1.17E+00	9.76E-01	8.47E+00	1.01E+01	4
214	15.841	15.478	1	1.87E+00	2.71E+00	2.62E+00	1.87E+00	2.71E+00	2.16E+01	2.42E+01	5
215	16.269	18.118	2	1.41E+01	2.99E+02	1.97E+01	1.41E+01	2.99E+02	2.11E+03	2.13E+03	8
221	16.393	18.433	10	2.32E-06	0.00E+00	3.25E-06	2.32E-06	0.00E+00	3.25E-06	6.50E-06	1
223	16.300	18.359	2	1.74E-01	2.45E+00	2.44E-01	1.74E-01	2.45E+00	1.74E+01	1.76E+01	5
226	16.382	18.616	1	7.34E-07	0.00E+00	1.03E-06	7.34E-07	0.00E+00	1.03E-06	2.06E-06	1
228	15.701	15.607	2	1.32E+00	2.23E+00	1.85E+00	1.32E+00	2.23E+00	1.75E+01	1.93E+01	5
232	15.630	14.497	6	3.18E-01	3.14E-01	4.45E-01	3.18E-01	3.14E-01	2.64E+00	3.09E+00	3
233	15.692	14.599	3	8.06E-01	6.30E-01	1.13E+00	8.06E-01	6.30E-01	5.54E+00	6.67E+00	4
234	15.772	14.883	8	1.45E+00	1.19E+00	2.03E+00	1.45E+00	1.19E+00	1.04E+01	1.24E+01	4
236	15.710	14.733	7	1.00E+00	7.78E-01	1.40E+00	1.00E+00	7.78E-01	6.85E+00	8.25E+00	4
237	15.776	14.522	2	1.24E+00	9.40E-01	1.74E+00	1.24E+00	9.40E-01	8.32E+00	1.01E+01	4
238	15.612	17.946	2	1.95E-01	3.39E+00	2.73E-01	1.95E-01	3.39E+00	2.40E+01	2.43E+01	5
Case 2: Protected 24 rounds at aimpoint (15.90, 19.45)											
1	16.058	16.697	2	5.52E-01	4.95E+00	7.73E-01	1.59E+00	1.59E+01	1.14E+02	1.14E+02	8
6	16.013	17.002	2	5.32E-01	8.97E+00	7.45E-01	1.53E+00	2.64E+01	1.87E+02	1.88E+02	8
11	16.118	16.767	2	5.47E-01	5.81E+00	7.66E-01	1.57E+00	1.80E+01	1.28E+02	1.29E+02	8
16	16.187	16.658	4	5.41E-01	4.27E+00	7.57E-01	1.57E+00	1.40E+01	1.00E+02	1.01E+02	8
19	16.065	16.500	4	5.17E-01	2.60E+00	7.24E-01	1.59E+00	1.11E+01	7.99E+01	8.06E+01	8
20	15.732	18.428	7	8.37E-02	4.61E+02	1.17E-01	6.75E-01	1.32E+03	9.24E+03	9.24E+03	8
21	16.357	16.781	7	1.20E-03	2.52E-01	1.68E-03	3.42E-03	7.78E-01	5.45E+00	5.45E+00	3
22	16.263	17.082	8	3.43E-01	6.84E+00	4.80E-01	9.83E-01	2.00E+01	1.41E+02	1.42E+02	8
23	15.640	18.125	6	2.73E-03	2.95E+00	3.82E-03	7.83E-03	8.44E+00	5.91E+01	5.91E+01	7
24	15.675	18.447	4	4.15E-02	1.81E+02	5.81E-02	2.96E-01	5.16E+02	3.61E+03	3.61E+03	8
25	15.684	18.075	1	1.45E-01	6.22E+01	2.03E-01	4.57E-01	1.78E+02	1.25E+03	1.25E+03	8
48	15.950	15.453	6	1.21E-03	0.00E+00	1.69E-03	1.47E+00	2.39E+00	1.88E+01	1.88E+01	5
50	15.975	14.694	3	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.04E+00	8.95E+00	8.95E+00	4
51	15.970	15.328	6	2.18E-04	0.00E+00	3.05E-04	1.44E+00	2.04E+00	1.63E+01	1.63E+01	5
52	15.803	14.834	2	0.00E+00	0.00E+00	0.00E+00	1.27E+00	1.14E+00	9.76E+00	9.76E+00	4
53	15.716	14.523	2	0.00E+00	0.00E+00	0.00E+00	7.93E-01	6.69E-01	5.79E+00	5.79E+00	3
54	15.841	14.686	3	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.01E+00	8.74E+00	8.74E+00	4
55	15.746	15.374	2	6.29E-04	0.00E+00	8.81E-04	1.30E+00	1.84E+00	1.47E+01	1.47E+01	4
57	15.907	15.517	2	8.14E-03	0.00E+00	1.14E-02	1.49E+00	2.76E+00	2.14E+01	2.14E+01	5
58	15.921	14.547	3	0.00E+00	0.00E+00	0.00E+00	1.11E+00	9.79E-01	8.41E+00	8.41E+00	4
59	16.339	14.858	3	0.00E+00	0.00E+00	0.00E+00	2.05E-01	2.43E-01	1.99E+00	1.99E+00	2
60	16.396	14.734	3	0.00E+00	0.00E+00	0.00E+00	1.08E-02	1.37E-02	1.11E-01	1.11E-01	1
62	16.143	14.987	4	0.00E+00	0.00E+00	0.00E+00	1.32E+00	1.36E+00	1.14E+01	1.14E+01	4
63	16.376	15.063	2	0.00E+00	0.00E+00	0.00E+00	6.03E-02	1.04E-01	8.12E-01	8.12E-01	2
77	16.101	16.650	2	5.40E-01	4.33E+00	7.56E-01	1.56E+00	1.43E+01	1.02E+02	1.03E+02	8
83	15.850	15.349	2	5.03E-04	0.00E+00	7.04E-04	1.45E+00	2.09E+00	1.67E+01	1.67E+01	5
84	15.751	14.664	3	0.00E+00	0.00E+00	0.00E+00	1.06E+00	8.20E-01	7.22E+00	7.22E+00	4
85	15.813	15.577	2	1.70E-02	0.00E+00	2.38E-02	1.51E+00	3.06E+00	2.35E+01	2.36E+01	5
89	16.009	18.852	4	1.15E-01	2.25E+03	1.61E-01	1.76E+00	6.44E+03	4.51E+04	4.51E+04	8
90	15.914	18.998	4	7.93E-02	2.86E+03	1.11E-01	1.24E+00	8.19E+03	5.73E+04	5.73E+04	8
91	15.692	19.420	4	3.18E-03	2.37E+02	4.45E-03	5.13E-02	6.78E+02	4.75E+03	4.75E+03	8
93	16.187	16.809	7	5.45E-01	6.13E+00	7.63E-01	1.56E+00	1.86E+01	1.32E+02	1.33E+02	8
95	15.626	18.194	33	7.96E-04	1.61E+00	1.11E-03	2.29E-03	4.61E+00	3.23E+01	3.23E+01	6
97	15.607	18.398	28	5.99E-08	1.82E-01	8.39E-08	1.64E-05	5.20E-01	3.64E+00	3.64E+00	3
99	16.079	16.804	3	5.50E-01	6.26E+00	7.70E-01	1.58E+00	1.91E+01	1.36E+02	1.37E+02	8
101	16.286	18.545	1	2.30E-02	2.71E+02	3.22E-02	3.30E-01	7.74E+02	5.42E+03	5.42E+03	8
103	16.329	18.484	2	1.42E-07	1.00E-01	1.99E-07	1.19E-04	2.86E-01	2.00E+00	2.00E+00	2
106	16.332	18.240	1	3.59E-05	5.50E-01	5.03E-05	1.16E-04	1.57E+00	1.10E+01	1.10E+01	4
112	16.100	17.033	3	5.25E-01	9.27E+00	7.35E-01	1.51E+00	2.73E+01	1.93E+02	1.94E+02	8
121	16.226	16.924	3	4.78E-01	6.75E+00	6.69E-01	1.37E+00	2.00E+01	1.42E+02	1.43E+02	8
129	16.188	16.473	40	5.04E-01	2.18E+00	7.06E-01	1.56E+00	9.94E+00	7.18E+01	7.25E+01	7
131	16.175	16.676	2	5.46E-01	4.56E+00	7.64E-01	1.58E+00	1.48E+01	1.06E+02	1.07E+02	8
132	16.015	16.530	5	5.23E-01	2.94E+00	7.32E-01	1.58E+00	1.17E+01	8.41E+01	8.48E+01	8
133	15.733	18.328	9	1.08E-01	3.24E+02	1.51E-01	5.77E-01	9.26E+02	6.48E+03	6.48E+03	8
135	16.324	16.829	12	6.94E-02	1.20E+00	9.72E-02	1.98E-01	3.63E+00	2.57E+01	2.58E+01	5

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

136	16.374	16.990	4	0.00E+00	1.44E-01	0.00E+00	0.00E+00	4.28E-01	3.00E+00	3.00E+00	2
140	15.641	18.402	24	3.52E-07	1.04E+00	4.93E-07	9.77E-05	2.96E+00	2.07E+01	2.07E+01	5
141	15.601	18.327	10	8.03E-09	3.86E-02	1.12E-08	1.57E-06	1.11E-01	7.77E-01	7.77E-01	2
143	15.719	18.229	16	1.44E-01	1.82E+02	2.02E-01	5.30E-01	5.19E+02	3.63E+03	3.63E+03	8
154	15.921	15.357	16	2.09E-04	0.00E+00	2.93E-04	1.45E+00	2.12E+00	1.69E+01	1.69E+01	5
160	15.588	14.773	2	0.00E+00	0.00E+00	0.00E+00	9.48E-02	1.25E-01	1.01E+00	1.01E+00	2
161	16.283	14.887	12	0.00E+00	0.00E+00	0.00E+00	5.89E-01	5.74E-01	4.84E+00	4.84E+00	3
162	15.618	14.622	2	0.00E+00	0.00E+00	0.00E+00	2.17E-01	2.50E-01	2.05E+00	2.05E+00	2
163	15.853	14.526	3	0.00E+00	0.00E+00	0.00E+00	1.09E+00	9.63E-01	8.27E+00	8.27E+00	4
164	15.667	14.794	3	0.00E+00	0.00E+00	0.00E+00	5.60E-01	5.12E-01	4.37E+00	4.37E+00	3
165	15.824	14.794	3	0.00E+00	0.00E+00	0.00E+00	1.25E+00	1.11E+00	9.52E+00	9.52E+00	4
166	16.178	15.100	4	0.00E+00	0.00E+00	0.00E+00	1.28E+00	1.45E+00	1.19E+01	1.19E+01	4
167	15.684	15.464	2	9.47E-04	0.00E+00	1.33E-03	8.26E-01	1.33E+00	1.05E+01	1.05E+01	4
168	15.780	15.281	2	6.84E-05	0.00E+00	9.58E-05	1.38E+00	1.78E+00	1.44E+01	1.44E+01	4
169	15.735	15.486	2	4.74E-03	0.00E+00	6.64E-03	1.25E+00	2.06E+00	1.62E+01	1.62E+01	5
170	16.241	14.979	9	0.00E+00	0.00E+00	0.00E+00	9.22E-01	9.42E-01	7.88E+00	7.88E+00	4
171	16.233	15.088	4	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.12E+00	9.24E+00	9.24E+00	4
172	16.219	14.747	1	0.00E+00	0.00E+00	0.00E+00	9.74E-01	8.44E-01	7.27E+00	7.27E+00	4
174	16.174	14.734	1	0.00E+00	0.00E+00	0.00E+00	1.15E+00	9.73E-01	8.42E+00	8.42E+00	4
176	16.349	14.675	1	0.00E+00	0.00E+00	0.00E+00	1.40E-01	1.71E-01	1.39E+00	1.39E+00	2
178	16.157	14.868	1	0.00E+00	0.00E+00	0.00E+00	1.27E+00	1.14E+00	9.76E+00	9.76E+00	4
185	16.181	17.037	4	5.36E-01	9.32E+00	7.50E-01	1.54E+00	2.74E+01	1.94E+02	1.95E+02	8
186	16.296	16.955	4	1.45E-01	2.75E+00	2.03E-01	4.15E-01	8.13E+00	5.75E+01	5.77E+01	7
187	16.163	16.951	4	5.51E-01	8.30E+00	7.71E-01	1.58E+00	2.45E+01	1.74E+02	1.74E+02	8
189	16.264	16.500	4	3.14E-01	1.63E+00	4.40E-01	9.59E-01	6.71E+00	4.83E+01	4.88E+01	6
190	16.032	16.870	4	5.54E-01	7.14E+00	7.76E-01	1.59E+00	2.13E+01	1.51E+02	1.52E+02	8
191	16.288	16.648	4	2.09E-01	1.85E+00	2.93E-01	6.04E-01	6.05E+00	4.32E+01	4.35E+01	6
192	16.005	16.725	4	5.41E-01	5.26E+00	7.57E-01	1.56E+00	1.66E+01	1.18E+02	1.19E+02	8
193	16.112	16.912	4	5.41E-01	7.69E+00	7.57E-01	1.55E+00	2.29E+01	1.62E+02	1.63E+02	8
194	16.252	16.789	4	4.07E-01	4.42E+00	5.70E-01	1.18E+00	1.35E+01	9.62E+01	9.67E+01	8
197	15.916	14.875	6	0.00E+00	0.00E+00	0.00E+00	1.30E+00	1.21E+00	1.03E+01	1.03E+01	4
199	15.987	14.868	2	0.00E+00	0.00E+00	0.00E+00	1.29E+00	1.20E+00	1.02E+01	1.02E+01	4
201	15.916	14.708	2	0.00E+00	0.00E+00	0.00E+00	1.20E+00	1.06E+00	9.10E+00	9.10E+00	4
202	16.294	14.763	6	0.00E+00	0.00E+00	0.00E+00	4.83E-01	4.61E-01	3.90E+00	3.90E+00	3
203	15.677	18.330	1	6.59E-02	1.32E+02	9.23E-02	3.03E-01	3.76E+02	2.63E+03	2.63E+03	8
209	16.134	16.486	1	5.14E-01	2.43E+00	7.20E-01	1.59E+00	1.08E+01	7.78E+01	7.85E+01	8
212	16.315	15.061	2	0.00E+00	0.00E+00	0.00E+00	3.65E-01	4.54E-01	3.69E+00	3.69E+00	3
213	16.228	14.881	2	0.00E+00	0.00E+00	0.00E+00	9.75E-01	9.07E-01	7.71E+00	7.71E+00	4
214	15.841	15.478	1	4.02E-03	0.00E+00	5.63E-03	1.48E+00	2.52E+00	1.97E+01	1.97E+01	5
215	16.269	18.118	2	1.03E-01	9.97E+01	1.44E-01	3.51E-01	2.85E+02	2.00E+03	2.00E+03	8
223	16.300	18.359	2	1.06E-06	8.16E-01	1.48E-06	1.34E-04	2.34E+00	1.64E+01	1.64E+01	5
228	15.701	15.607	2	1.43E-02	0.00E+00	2.00E-02	1.03E+00	2.07E+00	1.59E+01	1.60E+01	5
232	15.630	14.497	6	0.00E+00	0.00E+00	0.00E+00	2.59E-01	2.92E-01	2.41E+00	2.41E+00	2
233	15.692	14.599	3	0.00E+00	0.00E+00	0.00E+00	6.80E-01	5.86E-01	5.05E+00	5.05E+00	3
234	15.772	14.883	8	0.00E+00	0.00E+00	0.00E+00	1.22E+00	1.11E+00	9.48E+00	9.48E+00	4
236	15.710	14.733	7	0.00E+00	0.00E+00	0.00E+00	8.46E-01	7.24E-01	6.25E+00	6.25E+00	4
237	15.776	14.522	2	0.00E+00	0.00E+00	0.00E+00	1.04E+00	8.74E-01	7.57E+00	7.57E+00	4
238	15.612	17.946	2	3.24E-03	1.13E+00	4.54E-03	9.27E-03	3.24E+00	2.27E+01	2.27E+01	5

VX 250kg TBM
Light Attack
Height of Release: 500m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops				1 round at aimpoint (15.50, 19.70)							
15	15.135	17.274	2	8.47E-04	0.00E+00	1.19E-03	8.47E-04	0.00E+00	1.19E-03	2.37E-03	1
17	15.252	17.386	4	3.93E-02	6.28E-02	5.50E-02	3.93E-02	6.28E-02	4.95E-01	5.50E-01	2
18	15.173	17.315	9	3.18E-05	0.00E+00	4.45E-05	3.18E-05	0.00E+00	4.45E-05	8.90E-05	1
20	15.732	18.428	7	4.65E-05	0.00E+00	6.51E-05	4.65E-05	0.00E+00	6.51E-05	1.30E-04	1
23	15.640	18.125	6	1.16E-01	1.66E+00	1.62E-01	1.16E-01	1.66E+00	1.18E+01	1.19E+01	4
24	15.675	18.447	4	2.83E-02	0.00E+00	3.96E-02	2.83E-02	0.00E+00	3.96E-02	7.92E-02	1
25	15.684	18.075	1	3.94E-02	4.24E-02	5.52E-02	3.94E-02	4.24E-02	3.52E-01	4.07E-01	2
26	15.384	17.995	5	2.85E-01	1.10E+01	3.99E-01	2.85E-01	1.10E+01	7.74E+01	7.78E+01	8
27	15.405	18.172	4	3.44E-01	1.53E+01	4.82E-01	3.44E-01	1.53E+01	1.08E+02	1.08E+02	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

28	15.433	18.082	4	1.35E+00	7.39E+01	1.89E+00	1.35E+00	7.39E+01	5.19E+02	5.21E+02	8
29	15.452	18.232	4	1.79E+00	9.08E+01	2.51E+00	1.79E+00	9.08E+01	6.38E+02	6.41E+02	8
30	15.476	18.303	5	2.38E+00	1.63E+02	3.33E+00	2.38E+00	1.63E+02	1.14E+03	1.15E+03	8
31	15.526	18.028	4	2.76E+00	1.68E+02	3.86E+00	2.76E+00	1.68E+02	1.18E+03	1.18E+03	8
32	15.369	18.094	4	1.43E-01	3.66E+00	2.00E-01	1.43E-01	3.66E+00	2.58E+01	2.60E+01	5
44	14.944	14.076	2	1.08E-03	0.00E+00	1.51E-03	1.08E-03	0.00E+00	1.51E-03	3.02E-03	1
48	15.950	15.453	6	1.15E-02	3.35E-07	1.61E-02	1.15E-02	3.35E-07	1.61E-02	3.22E-02	1
49	14.871	14.057	2	2.87E-06	0.00E+00	4.02E-06	2.87E-06	0.00E+00	4.02E-06	8.04E-06	1
50	15.975	14.694	3	2.20E-02	5.33E-03	3.08E-02	2.20E-02	5.33E-03	6.81E-02	9.89E-02	1
51	15.970	15.328	6	1.04E-02	0.00E+00	1.46E-02	1.04E-02	0.00E+00	1.46E-02	2.91E-02	1
52	15.803	14.834	2	2.03E-01	6.24E+00	2.84E-01	2.03E-01	6.24E+00	4.40E+01	4.42E+01	6
53	15.716	14.523	2	6.75E-01	1.88E+01	9.45E-01	6.75E-01	1.88E+01	1.33E+02	1.33E+02	8
54	15.841	14.686	3	1.67E-01	3.85E+00	2.34E-01	1.67E-01	3.85E+00	2.72E+01	2.74E+01	5
55	15.746	15.374	2	4.42E-01	1.16E+01	6.19E-01	4.42E-01	1.16E+01	8.18E+01	8.24E+01	8
57	15.907	15.517	2	1.59E-02	0.00E+00	2.23E-02	1.59E-02	0.00E+00	2.23E-02	4.45E-02	1
58	15.921	14.547	3	7.71E-02	9.12E-01	1.08E-01	7.71E-02	9.12E-01	6.49E+00	6.60E+00	4
72	15.153	17.386	2	2.10E-05	0.00E+00	2.94E-05	2.10E-05	0.00E+00	2.94E-05	5.88E-05	1
75	14.913	14.211	4	1.03E-05	0.00E+00	1.44E-05	1.03E-05	0.00E+00	1.44E-05	2.88E-05	1
82	15.413	19.029	3	1.57E-01	0.00E+00	2.20E-01	1.57E-01	0.00E+00	2.20E-01	4.40E-01	2
83	15.850	15.349	2	9.98E-02	1.68E+00	1.40E-01	9.98E-02	1.68E+00	1.19E+01	1.20E+01	4
84	15.751	14.664	3	4.84E-01	1.28E+01	6.78E-01	4.84E-01	1.28E+01	9.03E+01	9.10E+01	8
85	15.813	15.577	2	1.32E-01	3.25E+00	1.85E-01	1.32E-01	3.25E+00	2.29E+01	2.31E+01	5
91	15.692	19.420	4	1.49E-05	0.00E+00	2.09E-05	1.49E-05	0.00E+00	2.09E-05	4.17E-05	1
92	15.441	19.341	4	2.65E-01	0.00E+00	3.71E-01	2.65E-01	0.00E+00	3.71E-01	7.42E-01	2
94	15.517	18.257	1	2.69E+00	1.88E+02	3.77E+00	2.69E+00	1.88E+02	1.32E+03	1.32E+03	8
95	15.626	18.194	33	1.30E-01	2.77E+00	1.82E-01	1.30E-01	2.77E+00	1.96E+01	1.98E+01	5
96	15.529	18.169	7	2.50E+00	1.55E+02	3.50E+00	2.50E+00	1.55E+02	1.09E+03	1.09E+03	8
97	15.607	18.398	28	1.16E-01	8.33E-01	1.62E-01	1.16E-01	8.33E-01	5.99E+00	6.16E+00	4
98	15.562	18.363	5	1.19E+00	4.76E+01	1.67E+00	1.19E+00	4.76E+01	3.35E+02	3.37E+02	8
130	15.248	17.308	16	4.02E-02	0.00E+00	5.63E-02	4.02E-02	0.00E+00	5.63E-02	1.13E-01	1
133	15.733	18.328	9	5.56E-05	0.00E+00	7.78E-05	5.56E-05	0.00E+00	7.78E-05	1.56E-04	1
134	15.206	17.396	10	4.50E-03	0.00E+00	6.30E-03	4.50E-03	0.00E+00	6.30E-03	1.26E-02	1
137	15.561	17.979	6	1.63E+00	9.46E+01	2.28E+00	1.63E+00	9.46E+01	6.64E+02	6.67E+02	8
138	15.585	18.218	2	6.42E-01	2.94E+01	8.99E-01	6.42E-01	2.94E+01	2.07E+02	2.08E+02	8
139	15.506	19.036	2	1.12E+00	1.12E+02	1.57E+00	1.12E+00	1.12E+02	7.86E+02	7.87E+02	8
140	15.641	18.402	24	7.32E-02	1.68E-01	1.02E-01	7.32E-02	1.68E-01	1.28E+00	1.38E+00	2
141	15.601	18.327	10	1.41E-01	1.61E+00	1.97E-01	1.41E-01	1.61E+00	1.15E+00	1.17E+01	4
143	15.719	18.229	16	7.88E-05	0.00E+00	1.10E-04	7.88E-05	0.00E+00	1.10E-04	2.21E-04	1
144	15.555	18.123	4	1.72E+00	9.21E+01	2.41E+00	1.72E+00	9.21E+01	6.47E+02	6.50E+02	8
153	14.854	13.963	2	6.96E-06	0.00E+00	9.74E-06	6.96E-06	0.00E+00	9.74E-06	1.95E-05	1
154	15.921	15.357	16	2.52E-02	1.63E-01	3.53E-02	2.52E-02	1.63E-01	1.18E+00	1.21E+00	2
160	15.588	14.773	2	1.47E+00	4.62E+01	2.06E+00	1.47E+00	4.62E+01	3.25E+02	3.28E+02	8
162	15.618	14.622	2	1.29E+00	3.85E+01	1.81E+00	1.29E+00	3.85E+01	2.71E+02	2.73E+02	8
163	15.853	14.526	3	1.64E-01	3.37E+00	2.30E-01	1.64E-01	3.37E+00	2.38E+01	2.40E+01	5
164	15.667	14.794	3	9.75E-01	2.92E+01	1.37E+00	9.75E-01	2.92E+01	2.06E+02	2.07E+02	8
165	15.824	14.794	3	1.80E-01	4.83E+00	2.52E-01	1.80E-01	4.83E+00	3.41E+01	3.43E+01	6
167	15.684	15.464	2	8.10E-01	2.58E+01	1.13E+00	8.10E-01	2.58E+01	1.82E+02	1.83E+02	8
168	15.780	15.281	2	2.76E-01	7.49E+00	3.86E-01	2.76E-01	7.49E+00	5.28E+01	5.32E+01	7
169	15.735	15.486	2	4.84E-01	1.35E+01	6.78E-01	4.84E-01	1.35E+01	9.52E+01	9.59E+01	8
197	15.916	14.875	6	6.39E-02	6.55E-01	8.95E-02	6.39E-02	6.55E-01	4.67E+00	4.76E+00	3
199	15.987	14.868	2	9.98E-03	0.00E+00	1.40E-02	9.98E-03	0.00E+00	1.40E-02	2.79E-02	1
201	15.916	14.708	2	7.31E-02	8.09E-01	1.02E-01	7.31E-02	8.09E-01	5.77E+00	5.87E+00	3
203	15.677	18.330	1	3.27E-02	0.00E+00	4.58E-02	3.27E-02	0.00E+00	4.58E-02	9.16E-02	1
214	15.841	15.478	1	1.01E-01	1.93E+00	1.41E-01	1.01E-01	1.93E+00	1.37E+01	1.38E+01	4
220	15.484	18.048	3	3.09E+00	1.92E+02	4.33E+00	3.09E+00	1.92E+02	1.35E+03	1.35E+03	8
227	15.113	17.328	1	5.57E-06	0.00E+00	7.80E-06	5.57E-06	0.00E+00	7.80E-06	1.56E-05	1
228	15.701	15.607	2	6.38E-01	2.04E+01	8.93E-01	6.38E-01	2.04E+01	1.44E+02	1.45E+02	8
232	15.630	14.497	6	1.20E+00	3.49E+01	1.68E+00	1.20E+00	3.49E+01	2.46E+02	2.48E+02	8
233	15.692	14.599	3	8.08E-01	2.32E+01	1.13E+00	8.08E-01	2.32E+01	1.64E+02	1.65E+02	8
234	15.772	14.883	8	3.55E-01	9.81E+00	4.97E-01	3.55E-01	9.81E+00	6.92E+01	6.97E+01	7
236	15.710	14.733	7	6.99E-01	1.99E+01	9.79E-01	6.99E-01	1.99E+01	1.40E+02	1.41E+02	8
237	15.776	14.522	2	3.63E-01	9.99E+00	5.08E-01	3.63E-01	9.99E+00	7.04E+01	7.09E+01	7
238	15.612	17.946	2	3.55E-01	1.47E+01	4.97E-01	3.55E-01	1.47E+01	1.03E+02	1.04E+02	8
Case 2: Protected 1 round at aimpoint (15.50, 19.00)											
27	15.405	18.172	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-01	7.07E-01	7.07E-01	2
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E+00	1.96E+01	1.96E+01	5
29	15.452	18.232	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E+00	4.11E+01	4.11E+01	6
30	15.476	18.303	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E+01	4.64E+02	4.64E+02	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E+02	7.07E+02	7.07E+02	8
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E+01	6.47E+02	6.47E+02	8
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E+01	4.87E+02	4.87E+02	8
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E+00	5.47E+01	5.47E+01	7
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E+00	1.74E+01	1.74E+01	5
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E+02	9.52E+02	9.52E+02	8

VX 500kg TBM
Moderate Attack
Height of Release: 700m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 2 rounds at aimpoint (14.60, 20.00)											
1	16.058	16.697	2	9.15E-02	3.78E+00	1.28E-01	9.15E-02	3.78E+00	2.66E+01	2.67E+01	5
3	16.398	18.288	5	8.37E-09	0.00E+00	1.17E-08	8.37E-09	0.00E+00	1.17E-08	2.34E-08	1
4	14.111	17.886	1	4.33E-01	7.78E+01	6.06E-01	4.33E-01	7.78E+01	5.45E+02	5.46E+02	8
5	14.117	18.329	2	4.88E-01	9.54E+01	6.83E-01	4.88E-01	9.54E+01	6.68E+02	6.69E+02	8
6	16.013	17.002	2	7.78E-02	3.26E+00	1.09E-01	7.78E-02	3.26E+00	2.29E+01	2.30E+01	5
7	14.261	17.923	5	5.57E-01	9.79E+01	7.80E-01	5.57E-01	9.79E+01	6.86E+02	6.87E+02	8
8	15.018	18.957	5	3.32E-01	1.34E+02	4.65E-01	3.32E-01	1.34E+02	9.38E+02	9.39E+02	8
9	14.935	19.036	1	2.51E-01	1.78E+02	3.51E-01	2.51E-01	1.78E+02	1.25E+03	1.25E+03	8
10	15.059	19.065	2	1.89E-01	5.61E+01	2.65E-01	1.89E-01	5.61E+01	3.93E+02	3.93E+02	8
11	16.118	16.767	2	6.16E-02	2.75E+00	8.62E-02	6.16E-02	2.75E+00	1.93E+01	1.94E+01	5
12	14.297	15.740	3	4.11E-01	4.49E+01	5.75E-01	4.11E-01	4.49E+01	3.15E+02	3.15E+02	8
13	14.424	15.732	2	4.04E-01	4.85E+01	5.66E-01	4.04E-01	4.85E+01	3.40E+02	3.41E+02	8
14	14.328	15.664	4	4.07E-01	4.45E+01	5.70E-01	4.07E-01	4.45E+01	3.12E+02	3.13E+02	8
15	15.135	17.274	2	4.72E-01	7.55E+01	6.61E-01	4.72E-01	7.55E+01	5.29E+02	5.30E+02	8
16	16.187	16.658	4	4.21E-02	2.06E+00	5.89E-02	4.21E-02	2.06E+00	1.45E+01	1.45E+01	4
17	15.252	17.386	4	4.10E-01	6.17E+01	5.74E-01	4.10E-01	6.17E+01	4.32E+02	4.33E+02	8
18	15.173	17.315	9	4.62E-01	7.15E+01	6.47E-01	4.62E-01	7.15E+01	5.01E+02	5.02E+02	8
19	16.065	16.500	4	1.04E-01	4.34E+00	1.46E-01	1.04E-01	4.34E+00	3.05E+01	3.07E+01	6
20	15.732	18.428	7	2.36E-03	2.34E-02	3.30E-03	2.36E-03	2.34E-02	1.67E-01	1.70E-01	1
21	16.357	16.781	7	6.32E-03	6.01E-01	8.85E-03	6.32E-03	6.01E-01	4.22E+00	4.22E+00	3
22	16.263	17.082	8	1.14E-02	6.23E-01	1.60E-02	1.14E-02	6.23E-01	4.38E+00	4.39E+00	3
23	15.640	18.125	6	3.27E-02	3.86E+00	4.58E-02	3.27E-02	3.86E+00	2.71E+01	2.71E+01	5
24	15.675	18.447	4	4.22E-03	2.48E-01	5.91E-03	4.22E-03	2.48E-01	1.74E+00	1.75E+00	2
25	15.684	18.075	1	3.76E-02	3.18E+00	5.26E-02	3.76E-02	3.18E+00	2.23E+01	2.24E+01	5
26	15.384	17.995	5	2.04E-01	3.12E+01	2.86E-01	2.04E-01	3.12E+01	2.19E+02	2.19E+02	8
27	15.405	18.172	4	1.54E-01	2.02E+01	2.16E-01	1.54E-01	2.02E+01	1.42E+02	1.42E+02	8
28	15.433	18.082	4	1.48E-01	2.07E+01	2.07E-01	1.48E-01	2.07E+01	1.45E+02	1.45E+02	8
29	15.452	18.232	4	1.16E-01	1.30E+01	1.62E-01	1.16E-01	1.30E+01	9.12E+01	9.13E+01	8
30	15.476	18.303	5	9.26E-02	8.53E+00	1.30E-01	9.26E-02	8.53E+00	5.98E+01	6.00E+01	7
31	15.526	18.028	4	9.21E-02	1.20E+01	1.29E-01	9.21E-02	1.20E+01	8.41E+01	8.43E+01	8
32	15.369	18.094	4	2.10E-01	3.10E+01	2.94E-01	2.10E-01	3.10E+01	2.17E+02	2.18E+02	8
33	14.295	15.942	18	4.17E-01	4.84E+01	5.84E-01	4.17E-01	4.84E+01	3.39E+02	3.40E+02	8
34	14.352	15.910	3	4.08E-01	4.99E+01	5.71E-01	4.08E-01	4.99E+01	3.50E+02	3.50E+02	8
35	14.200	15.526	2	3.99E-01	3.86E+01	5.59E-01	3.99E-01	3.86E+01	2.71E+02	2.71E+02	8
36	14.014	15.723	1	2.96E-01	3.40E+01	4.14E-01	2.96E-01	3.40E+01	2.38E+02	2.39E+02	8
37	13.967	15.661	3	2.72E-01	3.15E+01	3.81E-01	2.72E-01	3.15E+01	2.21E+02	2.21E+02	8
38	14.158	15.717	3	3.89E-01	3.97E+01	5.45E-01	3.89E-01	3.97E+01	2.78E+02	2.79E+02	8
39	14.167	15.640	1	3.88E-01	3.89E+01	5.43E-01	3.88E-01	3.89E+01	2.73E+02	2.73E+02	8
40	13.167	15.236	5	1.64E-01	6.37E+00	2.30E-01	1.64E-01	6.37E+00	4.48E+01	4.50E+01	6
41	13.523	15.457	5	1.81E-01	1.46E+01	2.53E-01	1.81E-01	1.46E+01	1.02E+02	1.03E+02	8
42	13.250	15.380	3	1.64E-01	7.89E+00	2.30E-01	1.64E-01	7.89E+00	5.55E+01	5.57E+01	7
43	13.293	15.301	4	1.65E-01	8.78E+00	2.31E-01	1.65E-01	8.78E+00	6.17E+01	6.19E+01	7
44	14.944	14.076	2	2.51E-01	2.50E+01	3.51E-01	2.51E-01	2.50E+01	1.75E+02	1.76E+02	8
45	14.877	14.351	4	2.58E-01	2.83E+01	3.61E-01	2.58E-01	2.83E+01	1.98E+02	1.99E+02	8
46	13.637	14.470	2	1.77E-01	1.46E+01	2.48E-01	1.77E-01	1.46E+01	1.02E+02	1.03E+02	8
47	14.765	14.203	4	2.35E-01	2.76E+01	3.29E-01	2.35E-01	2.76E+01	1.94E+02	1.94E+02	8
48	15.950	15.453	6	9.87E-02	8.98E+00	1.38E-01	9.87E-02	8.98E+00	6.30E+01	6.31E+01	7
49	14.871	14.057	2	2.36E-01	2.54E+01	3.30E-01	2.36E-01	2.54E+01	1.78E+02	1.78E+02	8
50	15.975	14.694	3	6.12E-02	8.28E+00	8.57E-02	6.12E-02	8.28E+00	5.80E+01	5.81E+01	7
51	15.970	15.328	6	8.71E-02	8.51E+00	1.22E-01	8.71E-02	8.51E+00	5.97E+01	5.98E+01	7
52	15.803	14.834	2	1.04E-01	1.20E+01	1.46E-01	1.04E-01	1.20E+01	8.41E+01	8.43E+01	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

53	15.716	14.523	2	1.48E-01	1.33E+01	2.07E-01	1.48E-01	1.33E+01	9.33E+01	9.35E+01	8
54	15.841	14.686	3	9.50E-02	1.10E+01	1.33E-01	9.50E-02	1.10E+01	7.71E+01	7.73E+01	8
55	15.746	15.374	2	1.36E-01	1.45E+01	1.90E-01	1.36E-01	1.45E+01	1.02E+02	1.02E+02	8
56	16.489	14.995	2	4.68E-02	1.76E+00	6.55E-02	4.68E-02	1.76E+00	1.24E+01	1.25E+01	4
57	15.907	15.517	2	1.04E-01	1.01E+01	1.46E-01	1.04E-01	1.01E+01	7.08E+01	7.10E+01	7
58	15.921	14.547	3	7.11E-02	9.19E+00	9.95E-02	7.11E-02	9.19E+00	6.44E+01	6.45E+01	7
59	16.339	14.858	3	7.88E-02	3.03E+00	1.10E-01	7.88E-02	3.03E+00	2.13E+01	2.14E+01	5
60	16.396	14.734	3	7.67E-02	2.49E+00	1.07E-01	7.67E-02	2.49E+00	1.75E+01	1.76E+01	5
61	16.479	14.715	3	5.72E-02	1.99E+00	8.01E-02	5.72E-02	1.99E+00	1.40E+01	1.41E+01	4
62	16.143	14.987	4	8.02E-02	5.51E+00	1.12E-01	8.02E-02	5.51E+00	3.87E+01	3.88E+01	6
63	16.376	15.063	2	6.79E-02	2.49E+00	9.51E-02	6.79E-02	2.49E+00	1.75E+01	1.76E+01	5
64	14.090	15.527	5	3.34E-01	3.47E+01	4.68E-01	3.34E-01	3.47E+01	2.43E+02	2.44E+02	8
65	14.026	15.514	4	2.95E-01	3.23E+01	4.13E-01	2.95E-01	3.23E+01	2.27E+02	2.27E+02	8
66	14.088	15.619	2	3.38E-01	3.57E+01	4.73E-01	3.38E-01	3.57E+01	2.50E+02	2.51E+02	8
67	14.034	15.648	3	3.07E-01	3.40E+01	4.30E-01	3.07E-01	3.40E+01	2.38E+02	2.39E+02	8
68	13.990	15.588	4	2.80E-01	3.17E+01	3.92E-01	2.80E-01	3.17E+01	2.22E+02	2.23E+02	8
69	13.972	15.518	1	2.67E-01	3.03E+01	3.74E-01	2.67E-01	3.03E+01	2.12E+02	2.13E+02	8
70	14.251	15.628	3	4.07E-01	4.16E+01	5.70E-01	4.07E-01	4.16E+01	2.92E+02	2.92E+02	8
71	14.520	15.772	5	4.22E-01	5.10E+01	5.91E-01	4.22E-01	5.10E+01	3.58E+02	3.58E+02	8
72	15.153	17.386	2	4.81E-01	7.69E+01	6.73E-01	4.81E-01	7.69E+01	5.39E+02	5.40E+02	8
73	14.648	14.038	4	2.22E-01	2.61E+01	3.11E-01	2.22E-01	2.61E+01	1.83E+02	1.83E+02	8
74	14.675	14.244	4	2.36E-01	2.82E+01	3.30E-01	2.36E-01	2.82E+01	1.98E+02	1.98E+02	8
75	14.913	14.211	4	2.55E-01	2.65E+01	3.57E-01	2.55E-01	2.65E+01	1.86E+02	1.86E+02	8
76	14.721	13.951	4	2.20E-01	2.52E+01	3.08E-01	2.20E-01	2.52E+01	1.77E+02	1.77E+02	8
77	16.101	16.650	2	7.77E-02	3.31E+00	1.09E-01	7.77E-02	3.31E+00	2.33E+01	2.34E+01	5
78	14.250	15.469	3	3.98E-01	3.91E+01	5.57E-01	3.98E-01	3.91E+01	2.74E+02	2.75E+02	8
79	14.331	15.561	3	4.05E-01	4.28E+01	5.67E-01	4.05E-01	4.28E+01	3.00E+02	3.01E+02	8
80	14.387	15.549	3	4.07E-01	4.42E+01	5.70E-01	4.07E-01	4.42E+01	3.10E+02	3.11E+02	8
81	14.397	15.423	3	4.06E-01	4.23E+01	5.68E-01	4.06E-01	4.23E+01	2.97E+02	2.97E+02	8
82	15.413	19.029	3	2.17E-02	0.00E+00	3.04E-02	2.17E-02	0.00E+00	3.04E-02	6.08E-02	1
83	15.850	15.349	2	1.05E-01	1.15E+01	1.47E-01	1.05E-01	1.15E+01	8.06E+01	8.08E+01	8
84	15.751	14.664	3	1.32E-01	1.29E+01	1.85E-01	1.32E-01	1.29E+01	9.05E+01	9.07E+01	8
85	15.813	15.577	2	1.04E-01	1.26E+01	1.46E-01	1.04E-01	1.26E+01	8.83E+01	8.85E+01	8
86	13.893	16.032	4	2.60E-01	3.15E+01	3.64E-01	2.60E-01	3.15E+01	2.21E+02	2.21E+02	8
87	14.568	16.110	4	4.94E-01	6.00E+01	6.92E-01	4.94E-01	6.00E+01	4.21E+02	4.21E+02	8
88	14.250	16.235	4	4.32E-01	5.23E+01	6.05E-01	4.32E-01	5.23E+01	3.67E+02	3.67E+02	8
89	16.009	18.852	4	6.81E-07	0.00E+00	9.53E-07	6.81E-07	0.00E+00	9.53E-07	1.91E-06	1
90	15.914	18.998	4	1.39E-06	0.00E+00	1.95E-06	1.39E-06	0.00E+00	1.95E-06	3.89E-06	1
91	15.692	19.420	4	6.11E-07	0.00E+00	8.55E-07	6.11E-07	0.00E+00	8.55E-07	1.71E-06	1
92	15.441	19.341	4	6.46E-06	0.00E+00	9.04E-06	6.46E-06	0.00E+00	9.04E-06	1.81E-05	1
93	16.187	16.809	7	3.06E-02	1.71E+00	4.28E-02	3.06E-02	1.71E+00	1.20E+01	1.21E+01	4
94	15.517	18.257	1	7.25E-02	6.72E+00	1.02E-01	7.25E-02	6.72E+00	4.71E+01	4.72E+01	6
95	15.626	18.194	33	2.62E-02	3.18E+00	3.67E-02	2.62E-02	3.18E+00	2.23E+01	2.23E+01	5
96	15.529	18.169	7	7.46E-02	8.23E+00	1.04E-01	7.46E-02	8.23E+00	5.77E+01	5.78E+01	7
97	15.607	18.398	28	7.10E-03	1.21E+00	9.94E-03	7.10E-03	1.21E+00	8.48E+00	8.49E+00	4
98	15.562	18.363	5	3.35E-02	2.93E+00	4.69E-02	3.35E-02	2.93E+00	2.06E+01	2.06E+01	5
99	16.079	16.804	3	7.45E-02	3.16E+00	1.04E-01	7.45E-02	3.16E+00	2.22E+01	2.23E+01	5
105	16.350	18.091	1	5.77E-07	0.00E+00	8.08E-07	5.77E-07	0.00E+00	8.08E-07	1.62E-06	1
106	16.332	18.240	1	4.07E-07	0.00E+00	5.70E-07	4.07E-07	0.00E+00	5.70E-07	1.14E-06	1
109	14.033	17.922	2	3.48E-01	6.66E+01	4.87E-01	3.48E-01	6.66E+01	4.67E+02	4.67E+02	8
110	14.310	18.223	4	6.06E-01	1.19E+02	8.48E-01	6.06E-01	1.19E+02	8.34E+02	8.35E+02	8
111	14.038	18.057	1	3.60E-01	7.04E+01	5.04E-01	3.60E-01	7.04E+01	4.93E+02	4.94E+02	8
112	16.100	17.033	3	4.81E-02	2.15E+00	6.73E-02	4.81E-02	2.15E+00	1.51E+01	1.52E+01	5
113	14.205	18.374	1	6.22E-01	1.19E+02	8.71E-01	6.22E-01	1.19E+02	8.34E+02	8.35E+02	8
114	14.232	18.233	12	6.01E-01	1.12E+02	8.41E-01	6.01E-01	1.12E+02	7.85E+02	7.86E+02	8
115	14.229	18.057	4	5.70E-01	1.02E+02	7.98E-01	5.70E-01	1.02E+02	7.15E+02	7.16E+02	8
116	14.089	18.241	2	4.39E-01	8.58E+01	6.15E-01	4.39E-01	8.58E+01	6.01E+02	6.02E+02	8
117	14.311	18.024	1	5.84E-01	1.07E+02	8.18E-01	5.84E-01	1.07E+02	7.50E+02	7.51E+02	8
118	14.022	18.183	1	3.42E-01	6.91E+01	4.79E-01	3.42E-01	6.91E+01	4.84E+02	4.85E+02	8
119	15.063	18.848	4	3.44E-01	1.03E+02	4.82E-01	3.44E-01	1.03E+02	7.21E+02	7.22E+02	8
120	15.074	19.229	12	6.35E-02	1.03E+01	8.89E-02	6.35E-02	1.03E+01	7.22E+01	7.23E+01	7
121	16.226	16.924	3	1.89E-02	1.12E+00	2.65E-02	1.89E-02	1.12E+00	7.87E+00	7.89E+00	4
122	15.000	19.241	2	9.79E-02	3.36E+01	1.37E-01	9.79E-02	3.36E+01	2.35E+02	2.35E+02	8
123	14.861	19.198	1	6.05E-02	8.86E+01	8.47E-02	6.05E-02	8.86E+01	6.20E+02	6.20E+02	8
124	15.107	19.036	1	1.58E-01	1.71E+01	2.21E-01	1.58E-01	1.71E+01	1.20E+02	1.20E+02	8
125	15.009	19.087	2	2.18E-01	9.96E+01	3.05E-01	2.18E-01	9.96E+01	6.98E+02	6.98E+02	8
126	14.890	19.069	1	1.96E-01	1.80E+02	2.74E-01	1.96E-01	1.80E+02	1.26E+03	1.26E+03	8
127	14.841	19.040	1	1.99E-01	1.12E+02	2.79E-01	1.99E-01	1.12E+02	7.84E+02	7.85E+02	8

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

128	15.124	19.175	4	5.60E-02	1.78E+00	7.84E-02	5.60E-02	1.78E+00	1.25E+01	1.26E+01	4
129	16.188	16.473	40	5.61E-02	2.47E+00	7.85E-02	5.61E-02	2.47E+00	1.74E+01	1.74E+01	5
130	15.248	17.308	16	4.08E-01	6.06E+01	5.71E-01	4.08E-01	6.06E+01	4.25E+02	4.25E+02	8
131	16.175	16.676	2	4.56E-02	2.19E+00	6.38E-02	4.56E-02	2.19E+00	1.54E+01	1.55E+01	5
132	16.015	16.530	5	1.22E-01	5.00E+00	1.71E-01	1.22E-01	5.00E+00	3.52E+01	3.53E+01	6
133	15.733	18.328	9	1.02E-02	4.20E-01	1.43E-02	1.02E-02	4.20E-01	2.95E+00	2.97E+00	2
134	15.206	17.396	10	4.56E-01	6.92E+01	6.38E-01	4.56E-01	6.92E+01	4.85E+02	4.86E+02	8
135	16.324	16.829	12	9.42E-03	7.25E-01	1.32E-02	9.42E-03	7.25E-01	5.09E+00	5.10E+00	3
136	16.374	16.990	4	2.56E-03	1.58E-01	3.58E-03	2.56E-03	1.58E-01	1.11E+00	1.11E+00	2
137	15.561	17.979	6	7.25E-02	1.05E+01	1.02E-01	7.25E-02	1.05E+01	7.36E+01	7.37E+01	7
138	15.585	18.218	2	3.38E-02	4.19E+00	4.73E-02	3.38E-02	4.19E+00	2.94E+01	2.94E+01	5
139	15.506	19.036	2	1.12E-02	0.00E+00	1.57E-02	1.12E-02	0.00E+00	1.57E-02	3.14E-02	1
140	15.641	18.402	24	5.68E-03	7.56E-01	7.95E-03	5.68E-03	7.56E-01	5.30E+00	5.31E+00	3
141	15.601	18.327	10	1.40E-02	2.09E+00	1.96E-02	1.40E-02	2.09E+00	1.46E+01	1.47E+01	4
142	14.434	15.611	3	4.05E-01	4.62E+01	5.67E-01	4.05E-01	4.62E+01	3.24E+02	3.25E+02	8
143	15.719	18.229	16	2.12E-02	1.05E+00	2.97E-02	2.12E-02	1.05E+00	7.38E+00	7.41E+00	4
144	15.555	18.123	4	6.26E-02	7.86E+00	8.76E-02	6.26E-02	7.86E+00	5.51E+01	5.52E+01	7
145	14.358	15.463	3	4.04E-01	4.20E+01	5.66E-01	4.04E-01	4.20E+01	2.95E+02	2.95E+02	8
146	14.184	15.394	5	3.81E-01	3.62E+01	5.33E-01	3.81E-01	3.62E+01	2.54E+02	2.54E+02	8
147	14.297	15.464	4	4.01E-01	4.03E+01	5.61E-01	4.01E-01	4.03E+01	2.83E+02	2.83E+02	8
148	13.681	14.597	1	1.65E-01	1.61E+01	2.31E-01	1.65E-01	1.61E+01	1.13E+02	1.13E+02	8
149	13.478	14.388	1	1.46E-01	1.13E+01	2.04E-01	1.46E-01	1.13E+01	7.93E+01	7.95E+01	8
150	13.534	14.378	1	1.65E-01	1.23E+01	2.31E-01	1.65E-01	1.23E+01	8.63E+01	8.66E+01	8
151	14.858	14.159	4	2.42E-01	2.65E+01	3.39E-01	2.42E-01	2.65E+01	1.86E+02	1.86E+02	8
152	14.625	14.322	4	2.36E-01	2.91E+01	3.30E-01	2.36E-01	2.91E+01	2.04E+02	2.04E+02	8
153	14.854	13.963	2	2.28E-01	2.47E+01	3.19E-01	2.28E-01	2.47E+01	1.73E+02	1.74E+02	8
154	15.921	15.357	16	9.59E-02	9.73E+00	1.34E-01	9.59E-02	9.73E+00	6.82E+01	6.84E+01	7
155	14.604	13.876	2	2.25E-01	2.47E+01	3.15E-01	2.25E-01	2.47E+01	1.73E+02	1.74E+02	8
156	14.760	14.069	2	2.24E-01	2.62E+01	3.14E-01	2.24E-01	2.62E+01	1.84E+02	1.84E+02	8
157	13.193	15.343	4	1.64E-01	6.73E+00	2.30E-01	1.64E-01	6.73E+00	4.73E+01	4.76E+01	6
158	13.389	15.206	4	1.58E-01	1.07E+01	2.21E-01	1.58E-01	1.07E+01	7.51E+01	7.53E+01	8
159	13.456	15.290	3	1.68E-01	1.25E+01	2.35E-01	1.68E-01	1.25E+01	8.77E+01	8.80E+01	8
160	15.588	14.773	2	2.14E-01	1.72E+01	3.00E-01	2.14E-01	1.72E+01	1.21E+02	1.21E+02	8
161	16.283	14.887	12	8.35E-02	3.67E+00	1.17E-01	8.35E-02	3.67E+00	2.58E+01	2.59E+01	5
162	15.618	14.622	2	2.05E-01	1.59E+01	2.87E-01	2.05E-01	1.59E+01	1.12E+02	1.12E+02	8
163	15.853	14.526	3	8.72E-02	1.05E+01	1.22E-01	8.72E-02	1.05E+01	7.36E+01	7.37E+01	7
164	15.667	14.794	3	1.78E-01	1.53E+01	2.49E-01	1.78E-01	1.53E+01	1.07E+02	1.08E+02	8
165	15.824	14.794	3	9.86E-02	1.15E+01	1.38E-01	9.86E-02	1.15E+01	8.06E+01	8.08E+01	8
166	16.178	15.100	4	7.96E-02	4.85E+00	1.11E-01	7.96E-02	4.85E+00	3.41E+01	3.42E+01	6
167	15.684	15.464	2	1.58E-01	1.68E+01	2.21E-01	1.58E-01	1.68E+01	1.18E+02	1.18E+02	8
168	15.780	15.281	2	1.25E-01	1.33E+01	1.75E-01	1.25E-01	1.33E+01	9.33E+01	9.35E+01	8
169	15.735	15.486	2	1.35E-01	1.51E+01	1.89E-01	1.35E-01	1.51E+01	1.06E+02	1.06E+02	8
170	16.241	14.979	9	8.35E-02	4.11E+00	1.17E-01	8.35E-02	4.11E+00	2.89E+01	2.90E+01	5
171	16.233	15.088	4	7.91E-02	4.12E+00	1.11E-01	7.91E-02	4.12E+00	2.90E+01	2.91E+01	5
172	16.219	14.747	1	9.50E-02	4.49E+00	1.33E-01	9.50E-02	4.49E+00	3.16E+01	3.17E+01	6
173	16.407	14.834	1	7.14E-02	2.30E+00	1.00E-01	7.14E-02	2.30E+00	1.62E+01	1.63E+01	5
174	16.174	14.734	1	9.17E-02	5.11E+00	1.28E-01	9.17E-02	5.11E+00	3.59E+01	3.60E+01	6
175	16.414	15.004	1	6.44E-02	2.16E+00	9.02E-02	6.44E-02	2.16E+00	1.52E+01	1.53E+01	5
176	16.349	14.675	1	8.31E-02	3.08E+00	1.16E-01	8.31E-02	3.08E+00	2.17E+01	2.18E+01	5
177	16.471	14.830	1	5.59E-02	1.94E+00	7.83E-02	5.59E-02	1.94E+00	1.37E+01	1.37E+01	4
178	16.157	14.868	1	8.60E-02	5.33E+00	1.20E-01	8.60E-02	5.33E+00	3.74E+01	3.76E+01	6
179	13.870	15.600	2	2.25E-01	2.71E+01	3.15E-01	2.25E-01	2.71E+01	1.90E+02	1.90E+02	8
180	13.871	15.733	2	2.35E-01	2.81E+01	3.29E-01	2.35E-01	2.81E+01	1.97E+02	1.97E+02	8
181	13.935	15.551	3	2.51E-01	2.92E+01	3.51E-01	2.51E-01	2.92E+01	2.05E+02	2.05E+02	8
182	13.925	15.695	2	2.55E-01	3.00E+01	3.57E-01	2.55E-01	3.00E+01	2.10E+02	2.11E+02	8
183	13.934	15.437	2	2.42E-01	2.82E+01	3.39E-01	2.42E-01	2.82E+01	1.98E+02	1.98E+02	8
184	13.867	15.450	2	2.10E-01	2.59E+01	2.94E-01	2.10E-01	2.59E+01	1.82E+02	1.82E+02	8
185	16.181	17.037	4	2.37E-02	1.22E+00	3.32E-02	2.37E-02	1.22E+00	8.57E+00	8.61E+00	4
186	16.296	16.955	4	1.08E-02	6.54E-01	1.51E-02	1.08E-02	6.54E-01	4.59E+00	4.61E+00	3
187	16.163	16.951	4	3.33E-02	1.65E+00	4.66E-02	3.33E-02	1.65E+00	1.16E+01	1.16E+01	4
188	14.436	15.492	3	4.00E-01	4.41E+01	5.60E-01	4.00E-01	4.41E+01	3.09E+02	3.10E+02	8
189	16.264	16.500	4	3.64E-02	1.74E+00	5.10E-02	3.64E-02	1.74E+00	1.22E+01	1.23E+01	4
190	16.032	16.870	4	8.63E-02	3.54E+00	1.21E-01	8.63E-02	3.54E+00	2.49E+01	2.50E+01	5
191	16.288	16.648	4	2.31E-02	1.30E+00	3.23E-02	2.31E-02	1.30E+00	9.13E+00	9.16E+00	4
192	16.005	16.725	4	1.11E-01	4.42E+00	1.55E-01	1.11E-01	4.42E+00	3.11E+01	3.13E+01	6
193	16.112	16.912	4	5.33E-02	2.39E+00	7.46E-02	5.33E-02	2.39E+00	1.68E+01	1.69E+01	5
194	16.252	16.789	4	1.97E-02	1.25E+00	2.76E-02	1.97E-02	1.25E+00	8.78E+00	8.81E+00	4
195	13.266	15.204	2	1.68E-01	8.21E+00	2.35E-01	1.68E-01	8.21E+00	5.77E+01	5.79E+01	7

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

196	13.429	15.394	2	1.70E-01	1.19E+01	2.38E-01	1.70E-01	1.19E+01	8.35E+01	8.38E+01	8
197	15.916	14.875	6	7.96E-02	9.63E+00	1.11E-01	7.96E-02	9.63E+00	6.75E+01	6.76E+01	7
198	13.455	14.706	10	1.46E-01	1.14E+01	2.04E-01	1.46E-01	1.14E+01	8.00E+01	8.02E+01	8
199	15.987	14.868	2	6.29E-02	8.11E+00	8.81E-02	6.29E-02	8.11E+00	5.69E+01	5.69E+01	7
200	13.360	15.319	2	1.64E-01	1.02E+01	2.30E-01	1.64E-01	1.02E+01	7.16E+01	7.19E+01	7
201	15.916	14.708	2	7.62E-02	9.48E+00	1.07E-01	7.62E-02	9.48E+00	6.65E+01	6.66E+01	7
202	16.294	14.763	6	8.68E-02	3.62E+00	1.22E-01	8.68E-02	3.62E+00	2.55E+01	2.56E+01	5
203	15.677	18.330	1	1.16E-02	9.37E-01	1.62E-02	1.16E-02	9.37E-01	6.58E+00	6.59E+00	4
205	14.177	18.046	1	5.32E-01	9.50E+01	7.45E-01	5.32E-01	9.50E+01	6.66E+02	6.66E+02	8
206	14.049	18.351	1	3.86E-01	7.78E+01	5.40E-01	3.86E-01	7.78E+01	5.45E+02	5.46E+02	8
207	14.908	18.942	1	3.30E-01	2.12E+02	4.62E-01	3.30E-01	2.12E+02	1.48E+03	1.48E+03	8
208	14.822	18.948	1	2.74E-01	1.11E+02	3.84E-01	2.74E-01	1.11E+02	7.77E+02	7.78E+02	8
209	16.134	16.486	1	7.71E-02	3.30E+00	1.08E-01	7.71E-02	3.30E+00	2.32E+01	2.33E+01	5
210	14.879	14.240	2	2.51E-01	2.71E+01	3.51E-01	2.51E-01	2.71E+01	1.90E+02	1.90E+02	8
211	13.294	15.448	1	1.64E-01	8.83E+00	2.30E-01	1.64E-01	8.83E+00	6.20E+01	6.23E+01	7
212	16.315	15.061	2	7.33E-02	3.20E+00	1.03E-01	7.33E-02	3.20E+00	2.25E+01	2.26E+01	5
213	16.228	14.881	2	8.95E-02	4.31E+00	1.25E-01	8.95E-02	4.31E+00	3.03E+01	3.04E+01	6
214	15.841	15.478	1	1.06E-01	1.18E+01	1.48E-01	1.06E-01	1.18E+01	8.27E+01	8.29E+01	8
215	16.269	18.118	2	1.38E-06	0.00E+00	1.93E-06	1.38E-06	0.00E+00	1.93E-06	3.86E-06	1
216	14.138	18.176	4	5.02E-01	9.35E+01	7.03E-01	5.02E-01	9.35E+01	6.55E+02	6.56E+02	8
217	14.112	18.070	5	4.54E-01	8.46E+01	6.36E-01	4.54E-01	8.46E+01	5.93E+02	5.93E+02	8
218	14.983	18.822	8	4.69E-01	1.84E+02	6.57E-01	4.69E-01	1.84E+02	1.29E+03	1.29E+03	8
219	14.925	18.819	5	4.47E-01	2.08E+02	6.26E-01	4.47E-01	2.08E+02	1.46E+03	1.46E+03	8
220	15.484	18.048	3	1.18E-01	1.55E+01	1.65E-01	1.18E-01	1.55E+01	1.09E+02	1.09E+02	8
223	16.300	18.359	2	1.53E-07	0.00E+00	2.14E-07	1.53E-07	0.00E+00	2.14E-07	4.28E-07	1
224	14.212	17.935	4	5.44E-01	9.45E+01	7.62E-01	5.44E-01	9.45E+01	6.62E+02	6.63E+02	8
225	15.036	18.722	4	4.61E-01	1.47E+02	6.45E-01	4.61E-01	1.47E+02	1.03E+03	1.03E+03	8
227	15.113	17.328	1	4.89E-01	8.02E+01	6.85E-01	4.89E-01	8.02E+01	5.62E+02	5.63E+02	8
228	15.701	15.607	2	1.43E-01	1.65E+01	2.00E-01	1.43E-01	1.65E+01	1.16E+02	1.16E+02	8
229	14.521	13.926	4	2.61E-01	2.47E+01	3.65E-01	2.61E-01	2.47E+01	1.73E+02	1.74E+02	8
230	14.523	14.092	4	2.75E-01	2.63E+01	3.85E-01	2.75E-01	2.63E+01	1.84E+02	1.85E+02	8
231	14.583	14.082	4	2.36E-01	2.65E+01	3.30E-01	2.36E-01	2.65E+01	1.86E+02	1.86E+02	8
232	15.630	14.497	6	1.97E-01	1.52E+01	2.76E-01	1.97E-01	1.52E+01	1.07E+02	1.07E+02	8
233	15.692	14.599	3	1.65E-01	1.41E+01	2.31E-01	1.65E-01	1.41E+01	9.89E+01	9.92E+01	8
234	15.772	14.883	8	1.22E-01	1.29E+01	1.71E-01	1.22E-01	1.29E+01	9.05E+01	9.06E+01	8
235	14.109	15.773	2	3.61E-01	3.84E+01	5.05E-01	3.61E-01	3.84E+01	2.69E+02	2.70E+02	8
236	15.710	14.733	7	1.54E-01	1.41E+01	2.16E-01	1.54E-01	1.41E+01	9.89E+01	9.91E+01	8
237	15.776	14.522	2	1.14E-01	1.20E+01	1.60E-01	1.14E-01	1.20E+01	8.42E+01	8.43E+01	8
238	15.612	17.946	2	4.77E-02	7.51E+00	6.68E-02	4.77E-02	7.51E+00	5.26E+01	5.27E+01	7
239	14.688	14.397	8	2.35E-01	2.97E+01	3.29E-01	2.35E-01	2.97E+01	2.08E+02	2.09E+02	8
240	14.775	14.328	12	2.36E-01	2.89E+01	3.30E-01	2.36E-01	2.89E+01	2.03E+02	2.03E+02	8
241	13.891	14.199	7	1.56E-01	1.86E+01	2.18E-01	1.56E-01	1.86E+01	1.30E+02	1.31E+02	8
242	13.901	14.027	7	1.52E-01	1.78E+01	2.13E-01	1.52E-01	1.78E+01	1.25E+02	1.25E+02	8

Case 2: Protected 2 rounds at aimpoint (15.45, 19.15)

20	15.732	18.428	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E+01	5.72E+02	5.72E+02	8
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E+00	1.04E+01	1.04E+01	4
24	15.675	18.447	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E+01	1.67E+02	1.67E+02	8
25	15.684	18.075	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E+00	1.77E+01	1.77E+01	5
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E+00	2.20E+01	2.20E+01	5
97	15.607	18.398	28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+00	8.33E+00	8.33E+00	4
98	15.562	18.363	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-01	2.81E+00	2.81E+00	2
119	15.063	18.848	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E+01	1.28E+02	1.28E+02	8
124	15.107	19.036	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-01	8.61E-01	8.61E-01	2
133	15.733	18.328	9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E+01	6.63E+02	6.63E+02	8
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-03	2.47E-02	2.47E-02	1
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E+00	1.27E+01	1.27E+01	4
140	15.641	18.402	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E+00	1.23E+01	1.23E+01	4
141	15.601	18.327	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E+00	1.59E+01	1.59E+01	5
143	15.719	18.229	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E+01	3.86E+02	3.86E+02	8
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-02	5.66E-01	5.66E-01	2
203	15.677	18.330	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E+01	2.37E+02	2.37E+02	8
218	14.983	18.822	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-01	3.30E+00	3.30E+00	3
225	15.036	18.722	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E+00	2.57E+01	2.57E+01	5

VX 500kg TBM
Heavy Attack
Height of Release: 700m

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected Troops 4 rounds at aimpoint (15.60, 19.90)												
1	16.058	16.697	2	1.32E+00	3.91E+01	1.85E+00	1.32E+00	3.91E+01	2.76E+02	2.77E+02	8	
3	16.398	18.288	5	1.35E-07	0.00E+00	1.89E-07	1.35E-07	0.00E+00	1.89E-07	3.78E-07	1	
6	16.013	17.002	2	1.31E+00	7.60E+01	1.83E+00	1.31E+00	7.60E+01	5.34E+02	5.36E+02	8	
8	15.018	18.957	5	1.09E-03	0.00E+00	1.53E-03	1.09E-03	0.00E+00	1.53E-03	3.05E-03	1	
9	14.935	19.036	1	1.51E-06	0.00E+00	2.11E-06	1.51E-06	0.00E+00	2.11E-06	4.23E-06	1	
10	15.059	19.065	2	8.68E-04	0.00E+00	1.22E-03	8.68E-04	0.00E+00	1.22E-03	2.43E-03	1	
11	16.118	16.767	2	7.18E-01	6.88E+00	1.01E+00	7.18E-01	6.88E+00	4.92E+01	5.02E+01	7	
15	15.135	17.274	2	4.86E-01	9.04E+00	6.80E-01	4.86E-01	9.04E+00	6.40E+01	6.46E+01	7	
16	16.187	16.658	4	1.28E-01	6.26E-01	1.79E-01	1.28E-01	6.26E-01	4.56E+00	4.74E+00	3	
17	15.252	17.386	4	6.74E-01	1.09E+02	9.44E-01	6.74E-01	1.09E+02	7.64E+02	7.65E+02	8	
18	15.173	17.315	9	5.93E-01	2.68E+01	8.30E-01	5.93E-01	2.68E+01	1.88E+02	1.89E+02	8	
19	16.065	16.500	4	1.39E+00	4.26E+01	1.95E+00	1.39E+00	4.26E+01	3.00E+02	3.02E+02	8	
20	15.732	18.428	7	1.18E-01	3.46E+00	1.65E-01	1.18E-01	3.46E+00	2.44E+01	2.46E+01	5	
21	16.357	16.781	7	1.30E-04	0.00E+00	1.82E-04	1.30E-04	0.00E+00	1.82E-04	3.64E-04	1	
22	16.263	17.082	8	3.04E-04	0.00E+00	4.26E-04	3.04E-04	0.00E+00	4.26E-04	8.51E-04	1	
23	15.640	18.125	6	1.16E-01	1.89E+00	1.62E-01	1.16E-01	1.89E+00	1.34E+01	1.36E+01	4	
24	15.675	18.447	4	6.49E-02	3.46E+00	9.09E-02	6.49E-02	3.46E+00	2.43E+01	2.44E+01	5	
25	15.684	18.075	1	2.57E-01	4.88E+01	3.60E-01	2.57E-01	4.88E+01	3.42E+02	3.42E+02	8	
26	15.384	17.995	5	2.95E-01	4.25E+01	4.13E-01	2.95E-01	4.25E+01	2.98E+02	2.98E+02	8	
27	15.405	18.172	4	1.45E-01	8.02E+00	2.03E-01	1.45E-01	8.02E+00	5.63E+01	5.65E+01	7	
28	15.433	18.082	4	1.93E-01	4.48E+00	2.70E-01	1.93E-01	4.48E+00	3.16E+01	3.19E+01	6	
29	15.452	18.232	4	7.42E-02	0.00E+00	1.04E-01	7.42E-02	0.00E+00	1.04E-01	2.08E-01	1	
30	15.476	18.303	5	2.41E-02	0.00E+00	3.37E-02	2.41E-02	0.00E+00	3.37E-02	6.75E-02	1	
31	15.526	18.028	4	1.22E-01	0.00E+00	1.71E-01	1.22E-01	0.00E+00	1.71E-01	3.42E-01	2	
32	15.369	18.094	4	2.11E-01	5.78E+01	2.95E-01	2.11E-01	5.78E+01	4.05E+02	4.05E+02	8	
44	14.944	14.076	2	2.77E-01	6.85E+00	3.88E-01	2.77E-01	6.85E+00	4.83E+01	4.87E+01	6	
45	14.877	14.351	4	1.34E-01	1.80E+00	1.88E-01	1.34E-01	1.80E+00	1.28E+01	1.30E+01	4	
47	14.765	14.203	4	2.15E-03	6.05E-02	3.01E-03	2.15E-03	6.05E-02	4.27E-01	4.30E-01	2	
48	15.950	15.453	6	3.42E+00	1.95E+02	4.79E+00	3.42E+00	1.95E+02	1.37E+03	1.37E+03	8	
49	14.871	14.057	2	1.41E-01	2.17E+00	1.97E-01	1.41E-01	2.17E+00	1.54E+01	1.56E+01	5	
50	15.975	14.694	3	3.44E+00	1.61E+02	4.82E+00	3.44E+00	1.61E+02	1.13E+03	1.14E+03	8	
51	15.970	15.328	6	3.27E+00	1.72E+02	4.58E+00	3.27E+00	1.72E+02	1.21E+03	1.21E+03	8	
52	15.803	14.834	2	5.23E+00	2.37E+02	7.32E+00	5.23E+00	2.37E+02	1.67E+03	1.67E+03	8	
53	15.716	14.523	2	4.15E+00	2.00E+02	5.81E+00	4.15E+00	2.00E+02	1.41E+03	1.41E+03	8	
54	15.841	14.686	3	4.83E+00	2.33E+02	6.76E+00	4.83E+00	2.33E+02	1.64E+03	1.64E+03	8	
55	15.746	15.374	2	4.26E+00	2.27E+02	5.96E+00	4.26E+00	2.27E+02	1.59E+03	1.60E+03	8	
56	16.489	14.995	2	6.19E-05	0.00E+00	8.67E-05	6.19E-05	0.00E+00	8.67E-05	1.73E-04	1	
57	15.907	15.517	2	3.84E+00	2.31E+02	5.38E+00	3.84E+00	2.31E+02	1.62E+03	1.63E+03	8	
58	15.921	14.547	3	4.02E+00	2.08E+02	5.63E+00	4.02E+00	2.08E+02	1.46E+03	1.47E+03	8	
59	16.339	14.858	3	1.11E-01	4.47E-01	1.55E-01	1.11E-01	4.47E-01	3.28E+00	3.44E+00	3	
60	16.396	14.734	3	8.19E-03	3.22E-02	1.15E-02	8.19E-03	3.22E-02	2.37E-01	2.48E-01	1	
61	16.479	14.715	3	8.91E-05	0.00E+00	1.25E-04	8.91E-05	0.00E+00	1.25E-04	2.49E-04	1	
62	16.143	14.987	4	1.11E+00	3.22E+01	1.55E+00	1.11E+00	3.22E+01	2.27E+02	2.29E+02	8	
63	16.376	15.063	2	3.58E-02	0.00E+00	5.01E-02	3.58E-02	0.00E+00	5.01E-02	1.00E-01	1	
72	15.153	17.386	2	4.78E-01	1.12E+01	6.69E-01	4.78E-01	1.12E+01	7.91E+01	7.97E+01	8	
73	14.648	14.038	4	1.63E-03	0.00E+00	2.28E-03	1.63E-03	0.00E+00	2.28E-03	4.56E-03	1	
74	14.675	14.244	4	5.86E-04	0.00E+00	8.20E-04	5.86E-04	0.00E+00	8.20E-04	1.64E-03	1	
75	14.913	14.211	4	2.10E-01	3.80E+00	2.94E-01	2.10E-01	3.80E+00	2.69E+01	2.72E+01	5	
76	14.721	13.951	4	5.46E-03	7.04E-02	7.64E-03	5.46E-03	7.04E-02	5.00E-01	5.08E-01	2	
77	16.101	16.650	2	9.43E-01	1.26E+01	1.32E+00	9.43E-01	1.26E+01	8.95E+01	9.08E+01	8	
82	15.413	19.029	3	3.23E-03	0.00E+00	4.52E-03	3.23E-03	0.00E+00	4.52E-03	9.04E-03	1	
83	15.850	15.349	2	4.55E+00	2.51E+02	6.37E+00	4.55E+00	2.51E+02	1.76E+03	1.77E+03	8	
84	15.751	14.664	3	4.59E+00	2.17E+02	6.43E+00	4.59E+00	2.17E+02	1.53E+03	1.53E+03	8	
85	15.813	15.577	2	4.80E+00	2.54E+02	6.72E+00	4.80E+00	2.54E+02	1.78E+03	1.79E+03	8	
89	16.009	18.852	4	8.70E-03	0.00E+00	1.22E-02	8.70E-03	0.00E+00	1.22E-02	2.44E-02	1	
90	15.914	18.998	4	1.38E-02	0.00E+00	1.93E-02	1.38E-02	0.00E+00	1.93E-02	3.86E-02	1	
93	16.187	16.809	7	1.10E-01	3.17E-01	1.54E-01	1.10E-01	3.17E-01	2.37E+00	2.53E+00	2	
94	15.517	18.257	1	3.47E-02	0.00E+00	4.86E-02	3.47E-02	0.00E+00	4.86E-02	9.72E-02	1	
95	15.626	18.194	33	6.14E-02	7.44E-01	8.60E-02	6.14E-02	7.44E-01	5.29E+00	5.38E+00	3	
96	15.529	18.169	7	6.45E-02	0.00E+00	9.03E-02	6.45E-02	0.00E+00	9.03E-02	1.81E-01	1	
97	15.607	18.398	28	6.60E-03	0.00E+00	9.24E-03	6.60E-03	0.00E+00	9.24E-03	1.85E-02	1	
98	15.562	18.363	5	6.89E-03	0.00E+00	9.65E-03	6.89E-03	0.00E+00	9.65E-03	1.93E-02	1	

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

99	16.079	16.804	3	1.03E+00	2.16E+01	1.44E+00	1.03E+00	2.16E+01	1.53E+02	1.54E+02	8
101	16.286	18.545	1	4.07E-06	0.00E+00	5.70E-06	4.07E-06	0.00E+00	5.70E-06	1.14E-05	1
103	16.329	18.484	2	2.82E-06	0.00E+00	3.95E-06	2.82E-06	0.00E+00	3.95E-06	7.90E-06	1
105	16.350	18.091	1	1.65E-05	0.00E+00	2.31E-05	1.65E-05	0.00E+00	2.31E-05	4.62E-05	1
106	16.332	18.240	1	8.95E-06	0.00E+00	1.25E-05	8.95E-06	0.00E+00	1.25E-05	2.51E-05	1
112	16.100	17.033	3	6.79E-01	4.63E+00	9.51E-01	6.79E-01	4.63E+00	3.34E+01	3.43E+01	6
119	15.063	18.848	4	6.67E-03	0.00E+00	9.34E-03	6.67E-03	0.00E+00	9.34E-03	1.87E-02	1
121	16.226	16.924	3	4.59E-04	0.00E+00	6.43E-04	4.59E-04	0.00E+00	6.43E-04	1.29E-03	1
124	15.107	19.036	1	2.88E-03	0.00E+00	4.03E-03	2.88E-03	0.00E+00	4.03E-03	8.06E-03	1
125	15.009	19.087	2	4.96E-05	0.00E+00	6.94E-05	4.96E-05	0.00E+00	6.94E-05	1.39E-04	1
126	14.890	19.069	1	4.87E-07	0.00E+00	6.82E-07	4.87E-07	0.00E+00	6.82E-07	1.36E-06	1
127	14.841	19.040	1	4.29E-07	0.00E+00	6.01E-07	4.29E-07	0.00E+00	6.01E-07	1.20E-06	1
129	16.188	16.473	40	1.52E-01	1.22E+00	2.13E-01	1.52E-01	1.22E+00	8.75E+00	8.97E+00	4
130	15.248	17.308	16	7.36E-01	1.07E+02	1.03E+00	7.36E-01	1.07E+02	7.50E+02	7.51E+02	8
131	16.175	16.676	2	2.37E-01	1.07E+00	3.32E-01	2.37E-01	1.07E+00	7.82E+00	8.15E+00	4
132	16.015	16.530	5	1.86E+00	9.88E+01	2.60E+00	1.86E+00	9.88E+01	6.94E+02	6.97E+02	8
133	15.733	18.328	9	1.36E-01	7.82E+00	1.90E-01	1.36E-01	7.82E+00	5.49E+01	5.51E+01	7
134	15.206	17.396	10	6.22E-01	4.90E+01	8.71E-01	6.22E-01	4.90E+01	3.44E+02	3.45E+02	8
135	16.324	16.829	12	2.19E-04	0.00E+00	3.07E-04	2.19E-04	0.00E+00	3.07E-04	6.13E-04	1
136	16.374	16.990	4	6.40E-05	0.00E+00	8.96E-05	6.40E-05	0.00E+00	8.96E-05	1.79E-04	1
137	15.561	17.979	6	9.42E-02	0.00E+00	1.32E-01	9.42E-02	0.00E+00	1.32E-01	2.64E-01	2
138	15.585	18.218	2	1.79E-02	0.00E+00	2.51E-02	1.79E-02	0.00E+00	2.51E-02	5.01E-02	1
139	15.506	19.036	2	1.47E-03	0.00E+00	2.06E-03	1.47E-03	0.00E+00	2.06E-03	4.12E-03	1
140	15.641	18.402	24	3.80E-02	0.00E+00	5.32E-02	3.80E-02	0.00E+00	5.32E-02	1.06E-01	1
141	15.601	18.327	10	1.13E-03	0.00E+00	1.58E-03	1.13E-03	0.00E+00	1.58E-03	3.16E-03	1
143	15.719	18.229	16	1.97E-01	2.54E+01	2.76E-01	1.97E-01	2.54E+01	1.78E+02	1.78E+02	8
144	15.555	18.123	4	6.04E-02	0.00E+00	8.46E-02	6.04E-02	0.00E+00	8.46E-02	1.69E-01	1
151	14.858	14.159	4	1.11E-01	1.63E+00	1.55E-01	1.11E-01	1.63E+00	1.16E+01	1.17E+01	4
152	14.625	14.322	4	1.67E-05	0.00E+00	2.34E-05	1.67E-05	0.00E+00	2.34E-05	4.68E-05	1
153	14.854	13.963	2	1.13E-01	1.88E+00	1.58E-01	1.13E-01	1.88E+00	1.33E+01	1.35E+01	4
154	15.921	15.357	16	3.78E+00	2.16E+02	5.29E+00	3.78E+00	2.16E+02	1.52E+03	1.52E+03	8
155	14.604	13.876	2	2.22E-04	0.00E+00	3.11E-04	2.22E-04	0.00E+00	3.11E-04	6.22E-04	1
156	14.760	14.069	2	4.81E-03	1.33E-01	6.73E-03	4.81E-03	1.33E-01	9.38E-01	9.44E-01	2
160	15.588	14.773	2	2.43E+00	1.04E+02	3.40E+00	2.43E+00	1.04E+02	7.31E+02	7.35E+02	8
161	16.283	14.887	12	2.07E-01	2.84E+00	2.90E-01	2.07E-01	2.84E+00	2.02E+01	2.05E+01	5
162	15.618	14.622	2	2.81E+00	1.27E+02	3.93E+00	2.81E+00	1.27E+02	8.93E+02	8.97E+02	8
163	15.853	14.526	3	4.72E+00	2.38E+02	6.61E+00	4.72E+00	2.38E+02	1.67E+03	1.68E+03	8
164	15.667	14.794	3	3.39E+00	1.62E+02	4.75E+00	3.39E+00	1.62E+02	1.14E+03	1.14E+03	8
165	15.824	14.794	3	5.01E+00	2.36E+02	7.01E+00	5.01E+00	2.36E+02	1.66E+03	1.67E+03	8
166	16.178	15.100	4	5.91E-01	1.80E+01	8.27E-01	5.91E-01	1.80E+01	1.27E+02	1.28E+02	8
167	15.684	15.464	2	3.25E+00	1.79E+02	4.55E+00	3.25E+00	1.79E+02	1.26E+03	1.26E+03	8
168	15.780	15.281	2	4.84E+00	2.41E+02	6.78E+00	4.84E+00	2.41E+02	1.69E+03	1.70E+03	8
169	15.735	15.486	2	4.01E+00	2.20E+02	5.61E+00	4.01E+00	2.20E+02	1.55E+03	1.55E+03	8
170	16.241	14.979	9	2.58E-01	6.04E+00	3.61E-01	2.58E-01	6.04E+00	4.26E+01	4.30E+01	6
171	16.233	15.088	4	2.42E-01	6.40E+00	3.39E-01	2.42E-01	6.40E+00	4.51E+01	4.55E+01	6
172	16.219	14.747	1	3.60E-01	1.18E+01	5.04E-01	3.60E-01	1.18E+01	8.31E+01	8.36E+01	8
173	16.407	14.834	1	1.27E-04	0.00E+00	1.78E-04	1.27E-04	0.00E+00	1.78E-04	3.56E-04	1
174	16.174	14.734	1	7.60E-01	2.40E+01	1.06E+00	7.60E-01	2.40E+01	1.69E+02	1.70E+02	8
175	16.414	15.004	1	1.03E-04	0.00E+00	1.44E-04	1.03E-04	0.00E+00	1.44E-04	2.88E-04	1
176	16.349	14.675	1	1.07E-01	5.98E-01	1.50E-01	1.07E-01	5.98E-01	4.34E+00	4.49E+00	3
177	16.471	14.830	1	8.55E-05	0.00E+00	1.20E-04	8.55E-05	0.00E+00	1.20E-04	2.39E-04	1
178	16.157	14.868	1	9.53E-01	2.80E+01	1.33E+00	9.53E-01	2.80E+01	1.97E+02	1.99E+02	8
185	16.181	17.037	4	1.29E-01	7.77E-02	1.81E-01	1.29E-01	7.77E-02	7.25E-01	9.05E-01	2
186	16.296	16.955	4	2.66E-04	0.00E+00	3.72E-04	2.66E-04	0.00E+00	3.72E-04	7.45E-04	1
187	16.163	16.951	4	2.74E-01	3.58E-01	3.84E-01	2.74E-01	3.58E-01	2.89E+00	3.27E+00	3
189	16.264	16.500	4	1.78E-02	0.00E+00	2.49E-02	1.78E-02	0.00E+00	2.49E-02	4.98E-02	1
190	16.032	16.870	4	1.34E+00	5.92E+01	1.88E+00	1.34E+00	5.92E+01	4.16E+02	4.18E+02	8
191	16.288	16.648	4	4.09E-03	0.00E+00	5.73E-03	4.09E-03	0.00E+00	5.73E-03	1.15E-02	1
192	16.005	16.725	4	1.77E+00	1.04E+02	2.48E+00	1.77E+00	1.04E+02	7.30E+02	7.33E+02	8
193	16.112	16.912	4	6.76E-01	5.28E+00	9.46E-01	6.76E-01	5.28E+00	3.79E+01	3.89E+01	6
194	16.252	16.789	4	4.43E-04	0.00E+00	6.20E-04	4.43E-04	0.00E+00	6.20E-04	1.24E-03	1
197	15.916	14.875	6	4.02E+00	2.10E+02	5.63E+00	4.02E+00	2.10E+02	1.48E+03	1.48E+03	8
199	15.987	14.868	2	3.27E+00	1.53E+02	4.58E+00	3.27E+00	1.53E+02	1.08E+03	1.08E+03	8
201	15.916	14.708	2	4.05E+00	2.05E+02	5.67E+00	4.05E+00	2.05E+02	1.44E+03	1.45E+03	8
202	16.294	14.763	6	2.08E-01	2.42E+00	2.91E-01	2.08E-01	2.42E+00	1.72E+01	1.75E+01	5
203	15.677	18.330	1	7.86E-02	1.20E+01	1.10E-01	7.86E-02	1.20E+01	8.41E+01	8.42E+01	8
207	14.908	18.942	1	2.98E-06	0.00E+00	4.17E-06	2.98E-06	0.00E+00	4.17E-06	8.34E-06	1
208	14.822	18.948	1	5.83E-07	0.00E+00	8.16E-07	5.83E-07	0.00E+00	8.16E-07	1.63E-06	1

Table E4
VX Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

209	16.134	16.486	1	6.97E-01	8.20E+00	9.76E-01	6.97E-01	8.20E+00	5.84E+01	5.94E+01	7
210	14.879	14.240	2	1.46E-01	2.05E+00	2.04E-01	1.46E-01	2.05E+00	1.46E+01	1.48E+01	4
212	16.315	15.061	2	1.27E-01	8.10E-01	1.78E-01	1.27E-01	8.10E-01	5.85E+00	6.03E+00	4
213	16.228	14.881	2	3.06E-01	9.01E+00	4.28E-01	3.06E-01	9.01E+00	6.35E+01	6.39E+01	7
214	15.841	15.478	1	4.57E+00	2.54E+02	6.40E+00	4.57E+00	2.54E+02	1.78E+03	1.79E+03	8
215	16.269	18.118	2	3.86E-05	0.00E+00	5.40E-05	3.86E-05	0.00E+00	5.40E-05	1.08E-04	1
218	14.983	18.822	8	8.87E-06	0.00E+00	1.24E-05	8.87E-06	0.00E+00	1.24E-05	2.48E-05	1
219	14.925	18.819	5	6.12E-06	0.00E+00	8.57E-06	6.12E-06	0.00E+00	8.57E-06	1.71E-05	1
220	15.484	18.048	3	1.61E-01	1.49E-01	2.25E-01	1.61E-01	1.49E-01	1.27E+00	1.49E+00	2
221	16.393	18.433	10	3.01E-07	0.00E+00	4.21E-07	3.01E-07	0.00E+00	4.21E-07	8.43E-07	1
223	16.300	18.359	2	4.77E-06	0.00E+00	6.68E-06	4.77E-06	0.00E+00	6.68E-06	1.34E-05	1
225	15.036	18.722	4	5.73E-03	0.00E+00	8.02E-03	5.73E-03	0.00E+00	8.02E-03	1.60E-02	1
226	16.382	18.616	1	5.61E-07	0.00E+00	7.85E-07	5.61E-07	0.00E+00	7.85E-07	1.57E-06	1
227	15.113	17.328	1	3.81E-01	3.74E+00	5.33E-01	3.81E-01	3.74E+00	2.67E+01	2.72E+01	5
228	15.701	15.607	2	3.40E+00	1.95E+02	4.76E+00	3.40E+00	1.95E+02	1.37E+03	1.37E+03	8
229	14.521	13.926	4	1.92E-06	0.00E+00	2.69E-06	1.92E-06	0.00E+00	2.69E-06	5.38E-06	1
230	14.523	14.092	4	1.09E-06	0.00E+00	1.53E-06	1.09E-06	0.00E+00	1.53E-06	3.05E-06	1
231	14.583	14.082	4	1.70E-06	0.00E+00	2.38E-06	1.70E-06	0.00E+00	2.38E-06	4.76E-06	1
232	15.630	14.497	6	3.04E+00	1.39E+02	4.26E+00	3.04E+00	1.39E+02	9.77E+02	9.82E+02	8
233	15.692	14.599	3	3.81E+00	1.82E+02	5.33E+00	3.81E+00	1.82E+02	1.28E+03	1.28E+03	8
234	15.772	14.883	8	4.86E+00	2.29E+02	6.80E+00	4.86E+00	2.29E+02	1.61E+03	1.62E+03	8
236	15.710	14.733	7	4.01E+00	1.93E+02	5.61E+00	4.01E+00	1.93E+02	1.36E+03	1.36E+03	8
237	15.776	14.522	2	4.94E+00	2.30E+02	6.92E+00	4.94E+00	2.30E+02	1.62E+03	1.62E+03	8
238	15.612	17.946	2	8.91E-02	2.98E+00	1.25E-01	8.91E-02	2.98E+00	2.10E+01	2.11E+01	5
239	14.688	14.397	8	5.59E-05	0.00E+00	7.83E-05	5.59E-05	0.00E+00	7.83E-05	1.57E-04	1
240	14.775	14.328	12	1.17E-04	0.00E+00	1.64E-04	1.17E-04	0.00E+00	1.64E-04	3.28E-04	1
Case 2: Protected 4 rounds at aimpoint (15.20, 20.00)											
9	14.935	19.036	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E+01	3.13E+02	3.13E+02	8
23	15.640	18.125	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-01	5.68E+00	5.68E+00	3
26	15.384	17.995	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E+01	9.24E+01	9.24E+01	8
27	15.405	18.172	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E+01	2.93E+02	2.93E+02	8
28	15.433	18.082	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E+01	3.08E+02	3.08E+02	8
29	15.452	18.232	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+02	7.21E+02	7.21E+02	8
30	15.476	18.303	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.92E+01	5.54E+02	5.54E+02	8
31	15.526	18.028	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E+01	1.59E+02	1.59E+02	8
32	15.369	18.094	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E+01	1.28E+02	1.28E+02	8
94	15.517	18.257	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E+01	5.24E+02	5.24E+02	8
95	15.626	18.194	33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E+00	1.84E+01	1.84E+01	5
96	15.529	18.169	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E+01	5.09E+02	5.09E+02	8
97	15.607	18.398	28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-01	4.94E+00	4.94E+00	3
98	15.562	18.363	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E+01	3.26E+02	3.26E+02	8
123	14.861	19.198	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E-01	2.57E+00	2.57E+00	2
126	14.890	19.069	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E+01	5.95E+02	5.95E+02	8
127	14.841	19.040	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-01	6.20E+00	6.20E+00	4
137	15.561	17.979	6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E+00	5.75E+01	5.75E+01	7
138	15.585	18.218	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E+01	1.93E+02	1.93E+02	8
140	15.641	18.402	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-01	9.66E-01	9.66E-01	2
141	15.601	18.327	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E+00	1.74E+01	1.74E+01	5
144	15.555	18.123	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E+01	3.49E+02	3.49E+02	8
207	14.908	18.942	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E+02	8.12E+02	8.12E+02	8
208	14.822	18.948	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-01	6.30E+00	6.30E+00	4
218	14.983	18.822	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E+00	2.88E+01	2.88E+01	5
219	14.925	18.819	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E+01	3.30E+02	3.30E+02	8
220	15.484	18.048	3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E+01	2.39E+02	2.39E+02	8
225	15.036	18.722	4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-02	2.12E-01	2.12E-01	1
238	15.612	17.946	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-01	5.82E+00	5.82E+00	3

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Mustard (HD) 152mm Artillery
Light Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (15.65, 18.45)									
20	15.732	18.428	7	4.70E+01	4.05E+01	1.05E+02	2	1	3
23	15.640	18.125	6	1.80E+01	6.01E+01	1.04E+02	2	1	3
24	15.675	18.447	4	7.12E-03	1.10E-06	7.12E-03	1	1	1
25	15.684	18.075	1	1.20E+01	3.92E+01	6.80E+01	2	1	2
95	15.626	18.194	33	4.41E+01	2.51E+02	4.03E+02	2	1	4
97	15.607	18.398	28	2.19E+02	4.64E+02	8.82E+02	6	5	6
133	15.733	18.328	9	4.51E+02	1.62E+03	2.77E+03	6	6	7
138	15.585	18.218	2	5.18E-05	0.00E+00	5.18E-05	1	1	1
140	15.641	18.402	24	4.13E+02	1.20E+03	2.13E+03	6	6	7
141	15.601	18.327	10	1.16E+01	2.57E+01	4.83E+01	2	1	2
143	15.719	18.229	16	6.18E+01	2.98E+02	4.88E+02	3	2	4
203	15.677	18.330	1	1.31E+02	5.13E+01	2.04E+02	5	4	3
238	15.612	17.946	2	1.24E-04	8.23E-01	1.18E+00	1	1	1

**Case 2a: Protected (Eye,
Respiratory Exposure)**

18 rounds at aimpoint (16.10, 16.60)									
1	16.058	16.697	2	2.29E-04	0.00E+00	2.29E-04	1	1	
19	16.065	16.500	4	7.03E-02	1.40E+02	7.03E-02	1	1	
77	16.101	16.650	2	1.03E-05	1.01E+02	1.03E-05	1	1	
129	16.188	16.473	40	3.64E-01	8.20E+02	3.64E-01	1	1	
209	16.134	16.486	1	1.58E-01	5.83E+02	1.58E-01	1	1	

**Case 2b: Protected (Skin
Exposure)**

18 rounds at aimpoint (16.10, 16.60)									
1	16.058	16.697	2	4.69E-03	0.00E+00	4.69E-03			1
19	16.065	16.500	4	1.08E+00	4.02E+02	5.75E+02			5
77	16.101	16.650	2	2.88E-02	2.88E+02	4.11E+02			4
129	16.188	16.473	40	4.76E+00	2.35E+03	3.36E+03			7
209	16.134	16.486	1	1.83E+00	1.67E+03	2.39E+03			7

Mustard (HD) MRLS
Moderate Attack
Height of Release: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (15.90, 19.80)									
1	16.058	16.697	2	9.95E+01	0.00E+00	9.95E+01	4	3	2
6	16.013	17.002	2	1.10E+02	0.00E+00	1.10E+02	5	4	3
11	16.118	16.767	2	9.92E+01	0.00E+00	9.92E+01	4	3	2
16	16.187	16.658	4	8.17E+01	0.00E+00	8.17E+01	4	3	2
19	16.065	16.500	4	9.62E+01	0.00E+00	9.62E+01	4	3	2
20	15.732	18.428	7	8.36E+01	0.00E+00	8.36E+01	4	3	2
21	16.357	16.781	7	6.23E+00	0.00E+00	6.23E+00	2	1	1
22	16.263	17.082	8	4.87E+01	0.00E+00	4.87E+01	2	1	2
23	15.640	18.125	6	3.11E+01	0.00E+00	3.11E+01	2	1	2
24	15.675	18.447	4	5.45E+01	0.00E+00	5.45E+01	3	2	2
25	15.684	18.075	1	5.86E+01	0.00E+00	5.86E+01	3	2	2
31	15.526	18.028	4	4.90E-01	0.00E+00	4.90E-01	1	1	1
48	15.950	15.453	6	8.25E+01	0.00E+00	8.25E+01	4	3	2
50	15.975	14.694	3	6.36E+01	0.00E+00	6.36E+01	3	2	2
51	15.970	15.328	6	7.86E+01	0.00E+00	7.86E+01	4	3	2
52	15.803	14.834	2	5.80E+01	0.00E+00	5.80E+01	3	2	2
53	15.716	14.523	2	3.38E+01	0.00E+00	3.38E+01	2	1	2
54	15.841	14.686	3	6.06E+01	0.00E+00	6.06E+01	3	2	2
55	15.746	15.374	2	5.44E+01	0.00E+00	5.44E+01	3	2	2
57	15.907	15.517	2	8.52E+01	0.00E+00	8.52E+01	4	3	2
58	15.921	14.547	3	6.12E+01	0.00E+00	6.12E+01	3	2	2
59	16.339	14.858	3	9.20E+00	0.00E+00	9.20E+00	2	1	1
60	16.396	14.734	3	1.24E+00	0.00E+00	1.24E+00	1	1	1
62	16.143	14.987	4	6.07E+01	0.00E+00	6.07E+01	3	2	2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

63	16.376	15.063	2	4.00E+00	0.00E+00	4.00E+00	1	1	1
77	16.101	16.650	2	9.76E+01	0.00E+00	9.76E+01	4	3	2
83	15.850	15.349	2	7.68E+01	0.00E+00	7.68E+01	4	3	2
84	15.751	14.664	3	4.41E+01	0.00E+00	4.41E+01	2	1	2
85	15.813	15.577	2	7.43E+01	0.00E+00	7.43E+01	4	3	2
89	16.009	18.852	4	9.44E+01	1.05E-01	9.46E+01	4	3	2
90	15.914	18.998	4	8.97E+01	1.52E+01	1.11E+02	4	3	3
91	15.692	19.420	4	2.51E+01	1.15E+02	1.89E+02	2	1	3
93	16.187	16.809	7	8.56E+01	0.00E+00	8.56E+01	4	3	2
94	15.517	18.257	1	1.17E-01	0.00E+00	1.17E-01	1	1	1
95	15.626	18.194	33	2.34E+01	0.00E+00	2.34E+01	2	1	1
96	15.529	18.169	7	3.17E-01	0.00E+00	3.17E-01	1	1	1
97	15.607	18.398	28	1.19E+01	0.00E+00	1.19E+01	2	1	1
98	15.562	18.363	5	2.02E+00	0.00E+00	2.02E+00	1	1	1
99	16.079	16.804	3	1.01E+02	0.00E+00	1.01E+02	5	4	3
101	16.286	18.545	1	2.47E+01	0.00E+00	2.47E+01	2	1	1
103	16.329	18.484	2	4.41E+00	0.00E+00	4.41E+00	1	1	1
105	16.350	18.091	1	9.61E-01	0.00E+00	9.61E-01	1	1	1
106	16.332	18.240	1	5.38E+00	0.00E+00	5.38E+00	2	1	1
112	16.100	17.033	3	1.08E+02	0.00E+00	1.08E+02	5	4	3
121	16.226	16.924	3	6.92E+01	0.00E+00	6.92E+01	3	2	2
129	16.188	16.473	40	7.77E+01	0.00E+00	7.77E+01	4	3	2
131	16.175	16.676	2	8.63E+01	0.00E+00	8.63E+01	4	3	2
132	16.015	16.530	5	9.95E+01	0.00E+00	9.95E+01	4	3	2
133	15.733	18.328	9	8.41E+01	0.00E+00	8.41E+01	4	3	2
135	16.324	16.829	12	1.61E+01	0.00E+00	1.61E+01	2	1	1
136	16.374	16.990	4	3.65E+00	0.00E+00	3.65E+00	1	1	1
137	15.561	17.979	6	3.18E+00	0.00E+00	3.18E+00	1	1	1
138	15.585	18.218	2	6.43E+00	0.00E+00	6.43E+00	2	1	1
140	15.641	18.402	24	3.20E+01	0.00E+00	3.20E+01	2	1	2
141	15.601	18.327	10	8.85E+00	0.00E+00	8.85E+00	2	1	1
143	15.719	18.229	16	7.83E+01	0.00E+00	7.83E+01	4	3	2
144	15.555	18.123	4	1.57E+00	0.00E+00	1.57E+00	1	1	1
154	15.921	15.357	16	8.12E+01	0.00E+00	8.12E+01	4	3	2
160	15.588	14.773	2	9.48E+00	0.00E+00	9.48E+00	2	1	1
161	16.283	14.887	12	2.33E+01	0.00E+00	2.33E+01	2	1	1
162	15.618	14.622	2	1.36E+01	0.00E+00	1.36E+01	2	1	1
163	15.853	14.526	3	5.83E+01	0.00E+00	5.83E+01	3	2	2
164	15.667	14.794	3	2.51E+01	0.00E+00	2.51E+01	2	1	2
165	15.824	14.794	3	6.06E+01	0.00E+00	6.06E+01	3	2	2
166	16.178	15.100	4	5.59E+01	0.00E+00	5.59E+01	3	2	2
167	15.684	15.464	2	3.63E+01	0.00E+00	3.63E+01	2	1	2
168	15.780	15.281	2	6.13E+01	0.00E+00	6.13E+01	3	2	2
169	15.735	15.486	2	5.25E+01	0.00E+00	5.25E+01	3	2	2
170	16.241	14.979	9	3.72E+01	0.00E+00	3.72E+01	2	1	2
171	16.233	15.088	4	4.11E+01	0.00E+00	4.11E+01	2	1	2
172	16.219	14.747	1	4.02E+01	0.00E+00	4.02E+01	2	1	2
173	16.407	14.834	1	7.47E-01	0.00E+00	7.47E-01	1	1	1
174	16.174	14.734	1	5.01E+01	0.00E+00	5.01E+01	3	2	2
175	16.414	15.004	1	7.35E-01	0.00E+00	7.35E-01	1	1	1
176	16.349	14.675	1	6.44E+00	0.00E+00	6.44E+00	2	1	1
178	16.157	14.868	1	5.60E+01	0.00E+00	5.60E+01	3	2	2
185	16.181	17.037	4	9.52E+01	0.00E+00	9.52E+01	4	3	2
186	16.296	16.955	4	2.72E+01	0.00E+00	2.72E+01	2	1	2
187	16.163	16.951	4	9.87E+01	0.00E+00	9.87E+01	4	3	2
189	16.264	16.500	4	4.29E+01	0.00E+00	4.29E+01	2	1	2
190	16.032	16.870	4	1.05E+02	0.00E+00	1.05E+02	5	4	3
191	16.288	16.648	4	3.09E+01	0.00E+00	3.09E+01	2	1	2
192	16.005	16.725	4	1.04E+02	0.00E+00	1.04E+02	5	4	3
193	16.112	16.912	4	1.04E+02	0.00E+00	1.04E+02	5	4	3
194	16.252	16.789	4	5.15E+01	0.00E+00	5.15E+01	3	2	2
197	15.916	14.875	6	6.95E+01	0.00E+00	6.95E+01	3	2	2
199	15.987	14.868	2	6.73E+01	0.00E+00	6.73E+01	3	2	2
201	15.916	14.708	2	6.53E+01	0.00E+00	6.53E+01	3	2	2
202	16.294	14.763	6	1.90E+01	0.00E+00	1.90E+01	2	1	1
203	15.677	18.330	1	5.61E+01	0.00E+00	5.61E+01	3	2	2
209	16.134	16.486	1	9.17E+01	0.00E+00	9.17E+01	4	3	2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

212	16.315	15.061	2	1.56E+01	0.00E+00	1.56E+01	2	1	1
213	16.228	14.881	2	3.96E+01	0.00E+00	3.96E+01	2	1	2
214	15.841	15.478	1	7.79E+01	0.00E+00	7.79E+01	4	3	2
215	16.269	18.118	2	4.35E+01	0.00E+00	4.35E+01	2	1	2
221	16.393	18.433	10	1.50E-02	0.00E+00	1.50E-02	1	1	1
223	16.300	18.359	2	1.25E+01	0.00E+00	1.25E+01	2	1	1
228	15.701	15.607	2	4.32E+01	0.00E+00	4.32E+01	2	1	2
232	15.630	14.497	6	1.49E+01	0.00E+00	1.49E+01	2	1	1
233	15.692	14.599	3	2.91E+01	0.00E+00	2.91E+01	2	1	2
234	15.772	14.883	8	5.24E+01	0.00E+00	5.24E+01	3	2	2
236	15.710	14.733	7	3.53E+01	0.00E+00	3.53E+01	2	1	2
237	15.776	14.522	2	4.65E+01	0.00E+00	4.65E+01	2	1	2
238	15.612	17.946	2	1.69E+01	0.00E+00	1.69E+01	2	1	1

**Case 2a: Protected (Eye,
Respiratory Exposure)**

240 rounds at aimpoint (15.40, 20.00)

8	15.018	18.957	5	4.91E-02	0.00E+00	4.91E-02	1	1	
10	15.059	19.065	2	7.70E-01	0.00E+00	7.70E-01	1	1	
82	15.413	19.029	3	1.33E+01	4.48E+00	1.33E+01	2	1	
91	15.692	19.420	4	4.39E+00	1.01E+02	4.39E+00	1	1	
92	15.441	19.341	4	1.31E+01	1.69E+02	1.31E+01	2	1	
119	15.063	18.848	4	2.41E-01	0.00E+00	2.41E-01	1	1	
120	15.074	19.229	12	2.19E+00	6.20E-01	2.19E+00	1	1	
122	15.000	19.241	2	8.26E-08	0.00E+00	8.26E-08	1	1	
124	15.107	19.036	1	4.10E+00	6.86E-02	4.10E+00	1	1	
125	15.009	19.087	2	1.88E-02	0.00E+00	1.88E-02	1	1	
128	15.124	19.175	4	6.54E+00	3.55E+00	6.54E+00	2	1	
139	15.506	19.036	2	1.48E+01	2.11E+00	1.48E+01	2	1	
140	15.641	18.402	24	6.24E-05	0.00E+00	6.24E-05	1	1	

**Case 2b: Protected (Skin
Exposure)**

240 rounds at aimpoint (15.40, 20.00)

8	15.018	18.957	5	5.26E-01	0.00E+00	5.26E-01			1
10	15.059	19.065	2	4.04E+00	4.50E-02	4.10E+00			1
15	15.135	17.274	2	9.41E+00	0.00E+00	9.41E+00			1
17	15.252	17.386	4	3.24E+01	0.00E+00	3.24E+01			2
18	15.173	17.315	9	1.64E+01	0.00E+00	1.64E+01			1
20	15.732	18.428	7	2.86E+01	0.00E+00	2.86E+01			2
23	15.640	18.125	6	1.01E+02	0.00E+00	1.01E+02			3
24	15.675	18.447	4	7.88E+01	0.00E+00	7.88E+01			2
25	15.684	18.075	1	6.86E+01	0.00E+00	6.86E+01			2
26	15.384	17.995	5	1.24E+02	0.00E+00	1.24E+02			3
27	15.405	18.172	4	1.29E+02	0.00E+00	1.29E+02			3
28	15.433	18.082	4	1.16E+02	0.00E+00	1.16E+02			3
29	15.452	18.232	4	1.12E+02	0.00E+00	1.12E+02			3
30	15.476	18.303	5	1.05E+02	0.00E+00	1.05E+02			3
31	15.526	18.028	4	1.02E+02	0.00E+00	1.02E+02			3
32	15.369	18.094	4	1.26E+02	0.00E+00	1.26E+02			3
72	15.153	17.386	2	1.99E+01	0.00E+00	1.99E+01			1
82	15.413	19.029	3	8.37E+01	1.48E+01	1.05E+02			3
91	15.692	19.420	4	1.27E+01	2.88E+02	4.24E+02			4
92	15.441	19.341	4	4.06E+01	4.85E+02	7.33E+02			5
94	15.517	18.257	1	1.03E+02	0.00E+00	1.03E+02			3
95	15.626	18.194	33	1.09E+02	0.00E+00	1.09E+02			3
96	15.529	18.169	7	1.05E+02	0.00E+00	1.05E+02			3
97	15.607	18.398	28	1.23E+02	0.00E+00	1.23E+02			3
98	15.562	18.363	5	1.14E+02	0.00E+00	1.14E+02			3
119	15.063	18.848	4	8.66E+00	0.00E+00	8.66E+00			1
120	15.074	19.229	12	6.38E+00	3.03E+00	1.07E+01			1
122	15.000	19.241	2	2.36E-07	0.00E+00	2.36E-07			1
124	15.107	19.036	1	2.31E+01	5.67E-01	2.39E+01			1
125	15.009	19.087	2	1.06E-01	0.00E+00	1.06E-01			1
128	15.124	19.175	4	2.14E+01	1.25E+01	3.93E+01			2
130	15.248	17.308	16	2.28E+01	0.00E+00	2.28E+01			1
133	15.733	18.328	9	2.82E+01	0.00E+00	2.82E+01			2
134	15.206	17.396	10	2.80E+01	0.00E+00	2.80E+01			2
137	15.561	17.979	6	1.08E+02	0.00E+00	1.08E+02			3
138	15.585	18.218	2	1.19E+02	0.00E+00	1.19E+02			3
139	15.506	19.036	2	7.74E+01	7.83E+00	8.86E+01			2
140	15.641	18.402	24	1.04E+02	0.00E+00	1.04E+02			3
141	15.601	18.327	10	1.24E+02	0.00E+00	1.24E+02			3

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

143	15.719	18.229	16	4.09E+01	0.00E+00	4.09E+01			2
144	15.555	18.123	4	1.10E+02	0.00E+00	1.10E+02			3
203	15.677	18.330	1	7.74E+01	0.00E+00	7.74E+01			2
220	15.484	18.048	3	1.01E+02	0.00E+00	1.01E+02			3
225	15.036	18.722	4	2.90E+00	0.00E+00	2.90E+00			1
227	15.113	17.328	1	9.81E+00	0.00E+00	9.81E+00			1
238	15.612	17.946	2	1.07E+02	0.00E+00	1.07E+02			3

Mustard (HD) MRLS
Heavy Attack
Height of Release: 15m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (15.80, 20.00)									
1	16.058	16.697	2	2.07E+02	0.00E+00	2.07E+02	6	5	3
2	16.495	18.182	2	7.71E-01	0.00E+00	7.71E-01	1	1	1
3	16.398	18.288	5	5.12E+01	0.00E+00	5.12E+01	3	2	2
6	16.013	17.002	2	2.18E+02	0.00E+00	2.18E+02	6	5	3
11	16.118	16.767	2	2.02E+02	0.00E+00	2.02E+02	6	5	3
15	15.135	17.274	2	1.87E-01	0.00E+00	1.87E-01	1	1	1
16	16.187	16.658	4	1.94E+02	0.00E+00	1.94E+02	6	5	3
17	15.252	17.386	4	2.00E+01	0.00E+00	2.00E+01	2	1	1
18	15.173	17.315	9	1.88E+00	0.00E+00	1.88E+00	1	1	1
19	16.065	16.500	4	2.06E+02	0.00E+00	2.06E+02	6	5	3
20	15.732	18.428	7	2.18E+02	2.00E-01	2.18E+02	6	5	3
21	16.357	16.781	7	9.05E+01	0.00E+00	9.05E+01	4	3	2
22	16.263	17.082	8	1.65E+02	0.00E+00	1.65E+02	6	5	3
23	15.640	18.125	6	2.31E+02	0.00E+00	2.31E+02	6	5	3
24	15.675	18.447	4	2.18E+02	2.71E-01	2.18E+02	6	5	3
25	15.684	18.075	1	2.25E+02	0.00E+00	2.25E+02	6	5	3
26	15.384	17.995	5	1.33E+02	0.00E+00	1.33E+02	5	4	3
27	15.405	18.172	4	1.44E+02	0.00E+00	1.44E+02	5	4	3
28	15.433	18.082	4	1.51E+02	0.00E+00	1.51E+02	6	5	3
29	15.452	18.232	4	1.53E+02	0.00E+00	1.53E+02	6	5	3
30	15.476	18.303	5	1.53E+02	0.00E+00	1.53E+02	6	5	3
31	15.526	18.028	4	1.91E+02	0.00E+00	1.91E+02	6	5	3
32	15.369	18.094	4	1.22E+02	0.00E+00	1.22E+02	5	4	3
48	15.950	15.453	6	2.22E+02	0.00E+00	2.22E+02	6	5	3
50	15.975	14.694	3	2.08E+02	0.00E+00	2.08E+02	6	5	3
51	15.970	15.328	6	2.17E+02	0.00E+00	2.17E+02	6	5	3
52	15.803	14.834	2	2.17E+02	0.00E+00	2.17E+02	6	5	3
53	15.716	14.523	2	2.06E+02	0.00E+00	2.06E+02	6	5	3
54	15.841	14.686	3	2.16E+02	0.00E+00	2.16E+02	6	5	3
55	15.746	15.374	2	2.18E+02	0.00E+00	2.18E+02	6	5	3
56	16.489	14.995	2	2.28E+01	0.00E+00	2.28E+01	2	1	1
57	15.907	15.517	2	2.27E+02	0.00E+00	2.27E+02	6	5	3
58	15.921	14.547	3	2.11E+02	0.00E+00	2.11E+02	6	5	3
59	16.339	14.858	3	9.68E+01	0.00E+00	9.68E+01	4	3	2
60	16.396	14.734	3	6.40E+01	0.00E+00	6.40E+01	3	2	2
61	16.479	14.715	3	2.75E+01	0.00E+00	2.75E+01	2	1	2
62	16.143	14.987	4	1.83E+02	0.00E+00	1.83E+02	6	5	3
63	16.376	15.063	2	7.61E+01	0.00E+00	7.61E+01	4	3	2
72	15.153	17.386	2	3.47E-01	0.00E+00	3.47E-01	1	1	1
77	16.101	16.650	2	2.02E+02	0.00E+00	2.02E+02	6	5	3
82	15.413	19.029	3	2.59E+02	4.29E+02	8.72E+02	6	6	6
83	15.850	15.349	2	2.26E+02	0.00E+00	2.26E+02	6	5	3
84	15.751	14.664	3	2.11E+02	0.00E+00	2.11E+02	6	5	3
85	15.813	15.577	2	2.26E+02	0.00E+00	2.26E+02	6	5	3
89	16.009	18.852	4	2.07E+02	1.79E+02	4.63E+02	6	5	4
90	15.914	18.998	4	3.64E+02	6.37E+02	1.27E+03	6	6	6
91	15.692	19.420	4	4.90E+02	3.05E+02	9.26E+02	6	6	6
92	15.441	19.341	4	3.02E+02	7.59E+02	1.39E+03	6	6	6
93	16.187	16.809	7	1.96E+02	0.00E+00	1.96E+02	6	5	3
94	15.517	18.257	1	1.73E+02	0.00E+00	1.73E+02	6	5	3

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

95	15.626	18.194	33	2.31E+02	0.00E+00	2.31E+02	6	5	3
96	15.529	18.169	7	1.89E+02	0.00E+00	1.89E+02	6	5	3
97	15.607	18.398	28	2.25E+02	3.72E-02	2.25E+02	6	5	3
98	15.562	18.363	5	2.04E+02	0.00E+00	2.04E+02	6	5	3
99	16.079	16.804	3	2.04E+02	0.00E+00	2.04E+02	6	5	3
100	16.436	18.381	3	1.60E+01	0.00E+00	1.60E+01	2	1	1
101	16.286	18.545	1	1.22E+02	0.00E+00	1.22E+02	5	4	3
102	16.523	18.281	2	2.08E-02	0.00E+00	2.08E-02	1	1	1
103	16.329	18.484	2	1.06E+02	0.00E+00	1.06E+02	5	4	3
104	16.470	18.045	6	5.56E+00	0.00E+00	5.56E+00	2	1	1
105	16.350	18.091	1	1.08E+02	0.00E+00	1.08E+02	5	4	3
106	16.332	18.240	1	1.13E+02	0.00E+00	1.13E+02	5	4	3
107	16.493	18.354	6	5.98E-01	0.00E+00	5.98E-01	1	1	1
108	16.408	18.056	12	4.40E+01	0.00E+00	4.40E+01	2	1	2
112	16.100	17.033	3	2.01E+02	0.00E+00	2.01E+02	6	5	3
121	16.226	16.924	3	1.84E+02	0.00E+00	1.84E+02	6	5	3
129	16.188	16.473	40	1.91E+02	0.00E+00	1.91E+02	6	5	3
130	15.248	17.308	16	1.90E+01	0.00E+00	1.90E+01	2	1	1
131	16.175	16.676	2	1.96E+02	0.00E+00	1.96E+02	6	5	3
132	16.015	16.530	5	2.17E+02	0.00E+00	2.17E+02	6	5	3
133	15.733	18.328	9	2.15E+02	0.00E+00	2.15E+02	6	5	3
134	15.206	17.396	10	5.06E+00	0.00E+00	5.06E+00	2	1	1
135	16.324	16.829	12	1.17E+02	0.00E+00	1.17E+02	5	4	3
136	16.374	16.990	4	7.67E+01	0.00E+00	7.67E+01	4	3	2
137	15.561	17.979	6	2.18E+02	0.00E+00	2.18E+02	6	5	3
138	15.585	18.218	2	2.25E+02	0.00E+00	2.25E+02	6	5	3
139	15.506	19.036	2	1.71E+02	5.56E+02	9.65E+02	6	5	6
140	15.641	18.402	24	2.19E+02	2.36E-01	2.19E+02	6	5	3
141	15.601	18.327	10	2.29E+02	0.00E+00	2.29E+02	6	5	3
143	15.719	18.229	16	2.18E+02	0.00E+00	2.18E+02	6	5	3
144	15.555	18.123	4	2.12E+02	0.00E+00	2.12E+02	6	5	3
154	15.921	15.357	16	2.23E+02	0.00E+00	2.23E+02	6	5	3
160	15.588	14.773	2	1.90E+02	0.00E+00	1.90E+02	6	5	3
161	16.283	14.887	12	1.28E+02	0.00E+00	1.28E+02	5	4	3
162	15.618	14.622	2	1.94E+02	0.00E+00	1.94E+02	6	5	3
163	15.853	14.526	3	2.13E+02	0.00E+00	2.13E+02	6	5	3
164	15.667	14.794	3	2.04E+02	0.00E+00	2.04E+02	6	5	3
165	15.824	14.794	3	2.16E+02	0.00E+00	2.16E+02	6	5	3
166	16.178	15.100	4	1.75E+02	0.00E+00	1.75E+02	6	5	3
167	15.684	15.464	2	2.15E+02	0.00E+00	2.15E+02	6	5	3
168	15.780	15.281	2	2.20E+02	0.00E+00	2.20E+02	6	5	3
169	15.735	15.486	2	2.19E+02	0.00E+00	2.19E+02	6	5	3
170	16.241	14.979	9	1.50E+02	0.00E+00	1.50E+02	6	5	3
171	16.233	15.088	4	1.55E+02	0.00E+00	1.55E+02	6	5	3
172	16.219	14.747	1	1.56E+02	0.00E+00	1.56E+02	6	5	3
173	16.407	14.834	1	5.84E+01	0.00E+00	5.84E+01	3	2	2
174	16.174	14.734	1	1.71E+02	0.00E+00	1.71E+02	6	5	3
175	16.414	15.004	1	5.50E+01	0.00E+00	5.50E+01	3	2	2
176	16.349	14.675	1	9.02E+01	0.00E+00	9.02E+01	4	3	2
177	16.471	14.830	1	2.99E+01	0.00E+00	2.99E+01	2	1	2
178	16.157	14.868	1	1.77E+02	0.00E+00	1.77E+02	6	5	3
185	16.181	17.037	4	1.99E+02	0.00E+00	1.99E+02	6	5	3
186	16.296	16.955	4	1.40E+02	0.00E+00	1.40E+02	5	4	3
187	16.163	16.951	4	2.00E+02	0.00E+00	2.00E+02	6	5	3
189	16.264	16.500	4	1.59E+02	0.00E+00	1.59E+02	6	5	3
190	16.032	16.870	4	2.13E+02	0.00E+00	2.13E+02	6	5	3
191	16.288	16.648	4	1.44E+02	0.00E+00	1.44E+02	5	4	3
192	16.005	16.725	4	2.21E+02	0.00E+00	2.21E+02	6	5	3
193	16.112	16.912	4	2.01E+02	0.00E+00	2.01E+02	6	5	3
194	16.252	16.789	4	1.70E+02	0.00E+00	1.70E+02	6	5	3
197	15.916	14.875	6	2.16E+02	0.00E+00	2.16E+02	6	5	3
199	15.987	14.868	2	2.09E+02	0.00E+00	2.09E+02	6	5	3
201	15.916	14.708	2	2.14E+02	0.00E+00	2.14E+02	6	5	3
202	16.294	14.763	6	1.21E+02	0.00E+00	1.21E+02	5	4	3
203	15.677	18.330	1	2.17E+02	0.00E+00	2.17E+02	6	5	3
204	16.461	18.591	1	9.11E-01	0.00E+00	9.11E-01	1	1	1
209	16.134	16.486	1	1.99E+02	0.00E+00	1.99E+02	6	5	3

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

212	16.315	15.061	2	1.12E+02	0.00E+00	1.12E+02	5	4	3
213	16.228	14.881	2	1.54E+02	0.00E+00	1.54E+02	6	5	3
214	15.841	15.478	1	2.27E+02	0.00E+00	2.27E+02	6	5	3
215	16.269	18.118	2	1.63E+02	0.00E+00	1.63E+02	6	5	3
220	15.484	18.048	3	1.64E+02	0.00E+00	1.64E+02	6	5	3
221	16.393	18.433	10	5.53E+01	0.00E+00	5.53E+01	3	2	2
222	16.447	18.213	2	8.98E+00	0.00E+00	8.98E+00	2	1	1
223	16.300	18.359	2	1.10E+02	0.00E+00	1.10E+02	5	4	3
226	16.382	18.616	1	6.41E+01	0.00E+00	6.41E+01	3	2	2
227	15.113	17.328	1	5.58E-02	0.00E+00	5.58E-02	1	1	1
228	15.701	15.607	2	2.17E+02	0.00E+00	2.17E+02	6	5	3
232	15.630	14.497	6	1.94E+02	0.00E+00	1.94E+02	6	5	3
233	15.692	14.599	3	2.05E+02	0.00E+00	2.05E+02	6	5	3
234	15.772	14.883	8	2.16E+02	0.00E+00	2.16E+02	6	5	3
236	15.710	14.733	7	2.08E+02	0.00E+00	2.08E+02	6	5	3
237	15.776	14.522	2	2.11E+02	0.00E+00	2.11E+02	6	5	3
238	15.612	17.946	2	2.37E+02	0.00E+00	2.37E+02	6	5	3

Case 2a: Protected (Eye,
Respiratory Exposure)

720 rounds at aimpoint (15.95, 19.35)									
2	16.495	18.182	2	1.05E-01	3.48E-02	1.05E-01	1	1	
3	16.398	18.288	5	6.25E-01	1.21E+01	6.25E-01	1	1	
20	15.732	18.428	7	1.26E+00	1.12E+01	1.26E+00	1	1	
23	15.640	18.125	6	3.31E-01	0.00E+00	3.31E-01	1	1	
24	15.675	18.447	4	1.32E+00	3.59E+00	1.32E+00	1	1	
25	15.684	18.075	1	8.40E-01	0.00E+00	8.40E-01	1	1	
27	15.405	18.172	4	1.65E-01	0.00E+00	1.65E-01	1	1	
28	15.433	18.082	4	8.45E-03	0.00E+00	8.45E-03	1	1	
29	15.452	18.232	4	1.69E-02	1.37E-02	1.69E-02	1	1	
30	15.476	18.303	5	2.66E-01	1.01E+00	2.66E-01	1	1	
31	15.526	18.028	4	9.66E-01	6.02E-02	9.66E-01	1	1	
82	15.413	19.029	3	7.50E-04	2.04E-01	7.50E-04	1	1	
89	16.009	18.852	4	1.35E+00	2.66E+01	1.35E+00	1	1	
90	15.914	18.998	4	7.56E-01	1.53E+01	7.56E-01	1	1	
91	15.692	19.420	4	9.48E-03	0.00E+00	9.48E-03	1	1	
94	15.517	18.257	1	6.29E-01	4.90E+00	6.29E-01	1	1	
95	15.626	18.194	33	9.27E-01	0.00E+00	9.27E-01	1	1	
96	15.529	18.169	7	6.73E-01	3.32E+00	6.73E-01	1	1	
97	15.607	18.398	28	1.57E+00	9.39E+00	1.57E+00	1	1	
98	15.562	18.363	5	1.24E+00	8.27E+01	1.24E+00	1	1	
100	16.436	18.381	3	1.09E+00	1.56E+01	1.09E+00	1	1	
101	16.286	18.545	1	1.42E+00	9.09E+01	1.42E+00	1	1	
103	16.329	18.484	2	1.54E+00	4.82E+01	1.54E+00	1	1	
104	16.470	18.045	6	6.19E-01	0.00E+00	6.19E-01	1	1	
105	16.350	18.091	1	7.35E-01	0.00E+00	7.35E-01	1	1	
106	16.332	18.240	1	1.88E+00	1.97E+01	1.88E+00	1	1	
107	16.493	18.354	6	1.77E-01	7.16E-02	1.77E-01	1	1	
108	16.408	18.056	12	1.99E-01	3.01E-03	1.99E-01	1	1	
133	15.733	18.328	9	1.43E+00	6.95E+00	1.43E+00	1	1	
137	15.561	17.979	6	1.22E+00	0.00E+00	1.22E+00	1	1	
138	15.585	18.218	2	1.65E+00	3.24E+00	1.65E+00	1	1	
139	15.506	19.036	2	3.79E-03	5.16E-03	3.79E-03	1	1	
140	15.641	18.402	24	6.39E-01	2.07E+00	6.39E-01	1	1	
141	15.601	18.327	10	2.07E+00	4.71E+00	2.07E+00	1	1	
143	15.719	18.229	16	1.59E+00	1.88E+00	1.59E+00	1	1	
144	15.555	18.123	4	1.06E+00	2.90E+00	1.06E+00	1	1	
203	15.677	18.330	1	1.46E+00	1.09E+00	1.46E+00	1	1	
204	16.461	18.591	1	1.74E+00	4.07E+01	1.74E+00	1	1	
215	16.269	18.118	2	2.41E+00	3.45E+00	2.41E+00	1	1	
220	15.484	18.048	3	3.71E-01	0.00E+00	3.71E-01	1	1	
221	16.393	18.433	10	5.90E-01	1.10E+02	5.90E-01	1	1	
222	16.447	18.213	2	1.00E+00	3.68E-01	1.00E+00	1	1	
223	16.300	18.359	2	3.65E+00	1.94E+02	3.65E+00	1	1	
226	16.382	18.616	1	5.39E-01	1.06E+01	5.39E-01	1	1	

Case 2b: Protected (Skin
Exposure)

720 rounds at aimpoint (15.95, 19.35)									
1	16.058	16.697	2	1.03E+01	0.00E+00	1.03E+01			1
2	16.495	18.182	2	2.60E+01	3.45E-01	2.65E+01			2
3	16.398	18.288	5	2.64E+01	5.68E+01	1.08E+02			3
6	16.013	17.002	2	3.39E+01	0.00E+00	3.39E+01			2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

11	16.118	16.767	2	1.12E+01	0.00E+00	1.12E+01		1
16	16.187	16.658	4	1.33E+01	0.00E+00	1.33E+01		1
17	15.252	17.386	4	4.56E-03	0.00E+00	4.56E-03		1
19	16.065	16.500	4	5.95E+00	0.00E+00	5.95E+00		1
20	15.732	18.428	7	4.93E+01	4.23E+02	6.54E+02		5
21	16.357	16.781	7	1.60E+01	0.00E+00	1.60E+01		1
22	16.263	17.082	8	3.35E+01	0.00E+00	3.35E+01		2
23	15.640	18.125	6	4.58E+01	1.89E+01	7.28E+01		2
24	15.675	18.447	4	3.61E+01	1.31E+02	2.23E+02		3
25	15.684	18.075	1	6.83E+01	2.73E+01	1.07E+02		3
26	15.384	17.995	5	1.31E+01	0.00E+00	1.31E+01		1
27	15.405	18.172	4	2.16E+01	3.20E-01	2.21E+01		1
28	15.433	18.082	4	2.00E+01	0.00E+00	2.00E+01		1
29	15.452	18.232	4	1.59E+01	5.73E+00	2.41E+01		1
30	15.476	18.303	5	2.84E+01	6.78E+01	1.25E+02		3
31	15.526	18.028	4	5.83E+01	2.88E+00	6.24E+01		2
32	15.369	18.094	4	8.24E+00	0.00E+00	8.24E+00		1
77	16.101	16.650	2	7.11E+00	0.00E+00	7.11E+00		1
82	15.413	19.029	3	4.16E-02	3.91E+01	5.59E+01		2
89	16.009	18.852	4	1.86E+01	1.41E+02	2.20E+02		3
90	15.914	18.998	4	4.92E+00	3.62E+02	5.22E+02		5
91	15.692	19.420	4	2.71E-02	0.00E+00	2.71E-02		1
93	16.187	16.809	7	1.85E+01	0.00E+00	1.85E+01		1
94	15.517	18.257	1	4.75E+01	7.77E+01	1.59E+02		3
95	15.626	18.194	33	4.32E+01	3.74E+01	9.66E+01		2
96	15.529	18.169	7	5.50E+01	2.81E+01	9.51E+01		2
97	15.607	18.398	28	3.50E+01	2.91E+02	4.51E+02		4
98	15.562	18.363	5	3.81E+01	3.05E+02	4.74E+02		4
99	16.079	16.804	3	1.27E+01	0.00E+00	1.27E+01		1
100	16.436	18.381	3	3.27E+01	7.19E+01	1.35E+02		3
101	16.286	18.545	1	3.37E+01	3.83E+02	5.81E+02		5
102	16.523	18.281	2	1.39E+01	0.00E+00	1.39E+01		1
103	16.329	18.484	2	4.59E+01	3.53E+02	5.50E+02		5
104	16.470	18.045	6	3.76E+01	0.00E+00	3.76E+01		2
105	16.350	18.091	1	8.01E+01	7.49E+00	9.08E+01		2
106	16.332	18.240	1	7.19E+01	1.06E+02	2.23E+02		3
107	16.493	18.354	6	2.87E+01	2.92E+00	3.29E+01		2
108	16.408	18.056	12	3.64E+01	2.89E-01	3.68E+01		2
112	16.100	17.033	3	2.24E+01	0.00E+00	2.24E+01		1
121	16.226	16.924	3	2.24E+01	0.00E+00	2.24E+01		1
129	16.188	16.473	40	6.95E+00	0.00E+00	6.95E+00		1
131	16.175	16.676	2	1.33E+01	0.00E+00	1.33E+01		1
132	16.015	16.530	5	1.08E+01	0.00E+00	1.08E+01		1
133	15.733	18.328	9	5.74E+01	4.23E+02	6.62E+02		5
135	16.324	16.829	12	2.01E+01	0.00E+00	2.01E+01		1
136	16.374	16.990	4	2.15E+01	0.00E+00	2.15E+01		1
137	15.561	17.979	6	5.39E+01	9.93E-01	5.53E+01		2
138	15.585	18.218	2	4.46E+01	3.58E+01	9.57E+01		2
139	15.506	19.036	2	4.16E-01	1.33E+02	1.90E+02		3
140	15.641	18.402	24	3.36E+01	5.46E+02	8.14E+02		6
141	15.601	18.327	10	3.92E+01	1.04E+02	1.88E+02		3
143	15.719	18.229	16	6.64E+01	2.07E+02	3.62E+02		4
144	15.555	18.123	4	5.49E+01	1.75E+01	7.99E+01		2
185	16.181	17.037	4	2.64E+01	0.00E+00	2.64E+01		2
186	16.296	16.955	4	2.62E+01	0.00E+00	2.62E+01		2
187	16.163	16.951	4	2.24E+01	0.00E+00	2.24E+01		1
189	16.264	16.500	4	7.36E+00	0.00E+00	7.36E+00		1
190	16.032	16.870	4	2.19E+01	0.00E+00	2.19E+01		1
191	16.288	16.648	4	1.40E+01	0.00E+00	1.40E+01		1
192	16.005	16.725	4	1.80E+01	0.00E+00	1.80E+01		1
193	16.112	16.912	4	1.72E+01	0.00E+00	1.72E+01		1
194	16.252	16.789	4	1.90E+01	0.00E+00	1.90E+01		1
203	15.677	18.330	1	4.60E+01	7.39E+02	1.10E+03		6
204	16.461	18.591	1	1.84E+01	1.75E+02	2.68E+02		4
209	16.134	16.486	1	5.86E+00	0.00E+00	5.86E+00		1
215	16.269	18.118	2	7.90E+01	5.01E+01	1.51E+02		3
220	15.484	18.048	3	4.67E+01	1.49E+00	4.88E+01		2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

221	16.393	18.433	10	2.37E+01	4.18E+02	6.21E+02			5
222	16.447	18.213	2	4.55E+01	5.46E+00	5.33E+01			2
223	16.300	18.359	2	6.23E+01	8.11E+02	1.22E+03			6
226	16.382	18.616	1	2.06E+01	1.67E+02	2.59E+02			4
238	15.612	17.946	2	4.16E+01	3.04E-01	4.21E+01			2

Mustard (HD) 250kg Bomb

Light Attack

Height of Release: 70m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (15.50, 18.60)									
23	15.640	18.125	6	3.36E+01	1.60E+02	2.62E+02	2	1	4
24	15.675	18.447	4	2.20E+01	2.04E+02	3.13E+02	2	1	4
25	15.684	18.075	1	5.39E+00	5.64E+01	8.60E+01	2	1	2
26	15.384	17.995	5	4.09E+00	4.53E+01	6.88E+01	1	1	2
27	15.405	18.172	4	1.38E+02	3.07E+02	5.77E+02	5	4	5
28	15.433	18.082	4	5.32E+00	6.07E+01	9.20E+01	2	1	2
29	15.452	18.232	4	6.94E-01	9.63E+00	1.45E+01	1	1	1
31	15.526	18.028	4	0.00E+00	1.90E-02	2.71E-02	1	1	1
32	15.369	18.094	4	6.53E+00	7.29E+01	1.11E+02	2	1	3
95	15.626	18.194	33	4.18E+01	2.00E+02	3.28E+02	2	1	4
97	15.607	18.398	28	8.66E+00	7.14E+01	1.11E+02	2	1	3
137	15.561	17.979	6	1.68E-04	2.64E+00	3.77E+00	1	1	1
138	15.585	18.218	2	4.73E-01	5.24E+00	7.96E+00	1	1	1
140	15.641	18.402	24	6.95E+02	4.77E+03	7.51E+03	6	6	8
141	15.601	18.327	10	3.01E+00	1.35E+01	2.23E+01	1	1	1
143	15.719	18.229	16	2.60E-01	2.73E+00	4.16E+00	1	1	1
144	15.555	18.123	4	9.78E-05	3.86E-01	5.52E-01	1	1	1
203	15.677	18.330	1	6.76E+01	2.91E+02	4.83E+02	3	2	4
220	15.484	18.048	3	3.36E-04	2.63E+00	3.76E+00	1	1	1
238	15.612	17.946	2	1.73E+00	2.04E+01	3.09E+01	1	1	2

Case 2a: Protected (Eye, Respiratory Exposure)

2 rounds at aimpoint (15.45, 18.55)									
23	15.640	18.125	6	9.70E-02	2.58E+01	9.70E-02	1	1	
25	15.684	18.075	1	0.00E+00	3.90E-01	0.00E+00	1	1	
26	15.384	17.995	5	3.54E-02	1.50E+01	3.54E-02	1	1	
27	15.405	18.172	4	9.37E-05	3.22E+00	9.37E-05	1	1	
28	15.433	18.082	4	0.00E+00	3.30E-01	0.00E+00	1	1	
31	15.526	18.028	4	1.76E-06	1.28E+00	1.76E-06	1	1	
32	15.369	18.094	4	2.74E-01	5.33E+01	2.74E-01	1	1	
95	15.626	18.194	33	4.36E-01	8.25E+01	4.36E-01	1	1	
96	15.529	18.169	7	1.84E-05	7.03E-01	1.84E-05	1	1	
97	15.607	18.398	28	1.26E+01	3.15E+03	1.26E+01	2	1	
98	15.562	18.363	5	7.62E-02	3.79E+01	7.62E-02	1	1	
137	15.561	17.979	6	1.62E-02	1.14E+01	1.62E-02	1	1	
138	15.585	18.218	2	3.91E+00	2.10E+02	3.91E+00	1	1	
140	15.641	18.402	24	4.22E-02	2.40E+01	4.22E-02	1	1	
141	15.601	18.327	10	2.14E+01	1.65E+03	2.14E+01	2	1	
144	15.555	18.123	4	4.74E-02	1.59E+01	4.74E-02	1	1	
220	15.484	18.048	3	0.00E+00	1.46E-02	0.00E+00	1	1	
238	15.612	17.946	2	5.30E-02	1.58E+01	5.30E-02	1	1	

Case 2b: Protected (Skin Exposure)

2 rounds at aimpoint (15.45, 18.55)									
23	15.640	18.125	6	1.89E+00	7.38E+01	1.07E+02			3
25	15.684	18.075	1	5.83E-05	1.12E+00	1.60E+00			1
26	15.384	17.995	5	1.05E+00	4.28E+01	6.22E+01			2
27	15.405	18.172	4	1.40E-01	9.21E+00	1.33E+01			1
28	15.433	18.082	4	7.14E-05	9.43E-01	1.35E+00			1
31	15.526	18.028	4	1.92E-02	3.67E+00	5.26E+00			1
32	15.369	18.094	4	5.03E+00	1.52E+02	2.22E+02			3
95	15.626	18.194	33	9.55E+00	2.36E+02	3.47E+02			4
96	15.529	18.169	7	2.64E-02	2.01E+00	2.90E+00			1
97	15.607	18.398	28	1.29E+02	9.00E+03	1.30E+04			9
98	15.562	18.363	5	1.13E+00	1.08E+02	1.55E+02			3
137	15.561	17.979	6	6.71E-01	3.27E+01	4.74E+01			2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

138	15.585	18.218	2	7.46E+01	6.00E+02	9.32E+02			6
140	15.641	18.402	24	5.80E-01	6.86E+01	9.86E+01			2
141	15.601	18.327	10	2.51E+02	4.71E+03	6.98E+03			8
144	15.555	18.123	4	1.07E+00	4.55E+01	6.61E+01			2
220	15.484	18.048	3	0.00E+00	4.18E-02	5.97E-02			1
238	15.612	17.946	2	1.16E+00	4.53E+01	6.59E+01			2

Mustard (HD) 250kg Bomb
Moderate Attack
Height of Release: 70m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
12 rounds at aimpoint (15.40, 18.70)									
20	15.732	18.428	7	4.12E+02	2.98E+03	4.67E+03	6	6	8
23	15.640	18.125	6	2.28E+01	1.51E+02	2.39E+02	2	1	3
24	15.675	18.447	4	8.94E+01	4.84E+02	7.81E+02	4	3	6
25	15.684	18.075	1	9.66E+00	7.62E+01	1.19E+02	2	1	3
26	15.384	17.995	5	5.15E+00	4.02E+01	6.26E+01	2	1	2
27	15.405	18.172	4	1.62E+01	1.30E+02	2.02E+02	2	1	3
28	15.433	18.082	4	1.22E+01	9.54E+01	1.48E+02	2	1	3
29	15.452	18.232	4	5.38E+02	5.51E+02	1.33E+03	6	6	6
30	15.476	18.303	5	1.02E+02	4.22E+02	7.05E+02	5	4	5
31	15.526	18.028	4	7.66E+00	5.65E+01	8.84E+01	2	1	2
32	15.369	18.094	4	1.42E+01	1.06E+02	1.66E+02	2	1	3
94	15.517	18.257	1	7.19E+01	3.03E+02	5.05E+02	4	3	5
95	15.626	18.194	33	4.42E+01	2.25E+02	3.66E+02	2	1	4
96	15.529	18.169	7	3.88E+01	1.96E+02	3.19E+02	2	1	4
97	15.607	18.398	28	9.69E+02	1.10E+03	2.54E+03	6	6	7
98	15.562	18.363	5	8.89E+02	2.11E+03	3.90E+03	6	6	7
133	15.733	18.328	9	5.83E+02	9.96E+02	2.01E+03	6	6	7
137	15.561	17.979	6	4.57E+00	3.59E+01	5.59E+01	1	1	2
138	15.585	18.218	2	3.77E+01	2.21E+02	3.53E+02	2	1	4
140	15.641	18.402	24	8.15E+02	4.20E+03	6.82E+03	6	6	8
141	15.601	18.327	10	5.17E+02	5.00E+02	1.23E+03	6	6	6
143	15.719	18.229	16	4.89E+01	2.54E+02	4.12E+02	2	1	4
144	15.555	18.123	4	2.54E+01	1.61E+02	2.55E+02	2	1	4
203	15.677	18.330	1	1.45E+02	4.79E+02	8.29E+02	5	4	6
220	15.484	18.048	3	7.44E+00	6.22E+01	9.63E+01	2	1	2
238	15.612	17.946	2	3.01E+00	2.45E+01	3.80E+01	1	1	2

**Case 2a: Protected (Eye,
Respiratory Exposure)**

12 rounds at aimpoint (15.45, 18.55)									
20	15.732	18.428	7	4.88E+00	1.68E+03	4.88E+00	1	1	
23	15.640	18.125	6	8.90E-01	1.04E+02	8.90E-01	1	1	
24	15.675	18.447	4	9.78E-02	6.30E+01	9.78E-02	1	1	
25	15.684	18.075	1	1.25E+00	1.22E+02	1.25E+00	1	1	
26	15.384	17.995	5	7.31E-01	5.69E+01	7.31E-01	1	1	
27	15.405	18.172	4	1.42E+01	5.45E+02	1.42E+01	2	1	
28	15.433	18.082	4	7.68E-01	8.40E+01	7.68E-01	1	1	
29	15.452	18.232	4	8.93E+00	3.41E+02	8.93E+00	2	1	
30	15.476	18.303	5	1.40E+00	3.27E+02	1.40E+00	1	1	
31	15.526	18.028	4	5.40E-01	6.39E+01	5.40E-01	1	1	
32	15.369	18.094	4	7.74E-01	9.46E+01	7.74E-01	1	1	
94	15.517	18.257	1	8.69E+00	8.52E+02	8.69E+00	2	1	
95	15.626	18.194	33	9.99E-01	1.65E+02	9.99E-01	1	1	
96	15.529	18.169	7	1.04E+00	1.50E+02	1.04E+00	1	1	
97	15.607	18.398	28	9.47E-01	1.59E+03	9.47E-01	1	1	
98	15.562	18.363	5	1.33E+01	1.37E+03	1.33E+01	2	1	
133	15.733	18.328	9	8.39E+00	5.78E+02	8.39E+00	2	1	
137	15.561	17.979	6	6.19E-01	3.71E+01	6.19E-01	1	1	
138	15.585	18.218	2	1.01E+01	6.14E+02	1.01E+01	2	1	
140	15.641	18.402	24	1.36E+01	2.79E+03	1.36E+01	2	1	
141	15.601	18.327	10	1.66E+01	5.54E+03	1.66E+01	2	1	
143	15.719	18.229	16	6.64E+00	4.91E+02	6.64E+00	2	1	
144	15.555	18.123	4	9.40E-01	9.52E+01	9.40E-01	1	1	

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Case 2b: Protected (Skin Exposure)

203	15.677	18.330	1	1.75E+00	6.15E+02	1.75E+00	1	1	
220	15.484	18.048	3	8.83E-01	9.33E+01	8.83E-01	1	1	
238	15.612	17.946	2	6.92E-01	3.86E+01	6.92E-01	1	1	
12 rounds at aimpoint (15.45, 18.55)									
20	15.732	18.428	7	5.58E+01	4.81E+03	6.93E+03			8
23	15.640	18.125	6	1.64E+01	2.97E+02	4.41E+02			4
24	15.675	18.447	4	1.22E+00	1.80E+02	2.58E+02			4
25	15.684	18.075	1	3.58E+01	3.50E+02	5.36E+02			5
26	15.384	17.995	5	7.83E+00	1.63E+02	2.41E+02			3
27	15.405	18.172	4	1.90E+02	1.56E+03	2.42E+03			7
28	15.433	18.082	4	1.08E+01	2.40E+02	3.54E+02			4
29	15.452	18.232	4	1.60E+02	9.76E+02	1.55E+03			7
30	15.476	18.303	5	1.75E+01	9.36E+02	1.35E+03			6
31	15.526	18.028	4	7.75E+00	1.83E+02	2.69E+02			4
32	15.369	18.094	4	1.19E+01	2.70E+02	3.98E+02			4
94	15.517	18.257	1	9.28E+01	2.44E+03	3.58E+03			7
95	15.626	18.194	33	2.11E+01	4.73E+02	6.97E+02			5
96	15.529	18.169	7	2.38E+01	4.30E+02	6.38E+02			5
97	15.607	18.398	28	1.40E+01	4.56E+03	6.53E+03			8
98	15.562	18.363	5	1.35E+02	3.93E+03	5.75E+03			8
133	15.733	18.328	9	8.87E+01	1.65E+03	2.45E+03			7
137	15.561	17.979	6	4.77E+00	1.06E+02	1.56E+02			3
138	15.585	18.218	2	1.16E+02	1.76E+03	2.63E+03			7
140	15.641	18.402	24	1.48E+02	7.99E+03	1.16E+04			8
141	15.601	18.327	10	1.89E+02	1.58E+04	2.28E+04			9
143	15.719	18.229	16	7.63E+01	1.41E+03	2.09E+03			7
144	15.555	18.123	4	1.70E+01	2.72E+02	4.06E+02			4
203	15.677	18.330	1	2.07E+01	1.76E+03	2.53E+03			7
220	15.484	18.048	3	1.99E+01	2.67E+02	4.01E+02			4
238	15.612	17.946	2	5.91E+00	1.10E+02	1.63E+02			3

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (15.40, 19.05)									
20	15.732	18.428	7	5.74E+02	6.66E+02	1.53E+03	6	6	7
23	15.640	18.125	6	1.01E+01	4.02E+01	6.75E+01	2	1	2
24	15.675	18.447	4	2.91E+02	5.27E+02	1.04E+03	6	6	6
25	15.684	18.075	1	6.57E+00	2.36E+01	4.03E+01	2	1	2
26	15.384	17.995	5	3.51E+00	1.15E+01	1.99E+01	1	1	1
27	15.405	18.172	4	1.09E+01	5.33E+01	8.70E+01	2	1	2
28	15.433	18.082	4	6.94E+00	2.64E+01	4.47E+01	2	1	2
29	15.452	18.232	4	3.72E+01	1.26E+02	2.17E+02	2	1	3
30	15.476	18.303	5	1.05E+02	1.83E+02	3.66E+02	5	4	4
31	15.526	18.028	4	4.96E+00	1.61E+01	2.80E+01	1	1	2
32	15.369	18.094	4	7.00E+00	2.90E+01	4.84E+01	2	1	2
82	15.413	19.029	3	2.26E+02	1.12E+03	1.83E+03	6	5	7
94	15.517	18.257	1	3.13E+01	1.18E+02	2.00E+02	2	1	3
95	15.626	18.194	33	1.61E+01	7.26E+01	1.20E+02	2	1	3
96	15.529	18.169	7	1.36E+01	5.90E+01	9.79E+01	2	1	2
97	15.607	18.398	28	3.40E+02	2.94E+02	7.60E+02	6	6	6
98	15.562	18.363	5	5.56E+02	4.21E+02	1.16E+03	6	6	6
133	15.733	18.328	9	3.11E+02	2.59E+02	6.81E+02	6	6	5
137	15.561	17.979	6	3.31E+00	1.01E+01	1.77E+01	1	1	1
138	15.585	18.218	2	1.74E+01	8.42E+01	1.38E+02	2	1	3
139	15.506	19.036	2	2.37E+02	1.18E+03	1.92E+03	6	5	7
140	15.641	18.402	24	7.71E+02	6.77E+02	1.74E+03	6	6	7
141	15.601	18.327	10	6.25E+01	1.56E+02	2.85E+02	3	2	4
143	15.719	18.229	16	1.99E+01	9.27E+01	1.52E+02	2	1	3
144	15.555	18.123	4	9.66E+00	4.00E+01	6.68E+01	2	1	2
203	15.677	18.330	1	1.62E+02	2.29E+02	4.89E+02	6	5	4
220	15.484	18.048	3	5.30E+00	1.87E+01	3.20E+01	2	1	2

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

Case 2a: Protected (Eye,
Respiratory Exposure)

238	15.612	17.946	2	2.19E+00	6.86E+00	1.20E+01	1	1	1
24 rounds at aimpoint (15.35, 18.90)									
20	15.732	18.428	7	4.22E-01	1.00E+02	4.22E-01	1	1	
23	15.640	18.125	6	2.10E+00	4.11E+01	2.10E+00	1	1	
24	15.675	18.447	4	1.60E+00	2.69E+02	1.60E+00	1	1	
25	15.684	18.075	1	2.10E+00	3.29E+01	2.10E+00	1	1	
26	15.384	17.995	5	1.83E+00	1.55E+01	1.83E+00	1	1	
27	15.405	18.172	4	2.59E+00	1.03E+02	2.59E+00	1	1	
28	15.433	18.082	4	2.15E+00	3.23E+01	2.15E+00	1	1	
29	15.452	18.232	4	2.08E+00	8.02E+01	2.08E+00	1	1	
30	15.476	18.303	5	2.55E+00	1.99E+02	2.55E+00	1	1	
31	15.526	18.028	4	1.91E+00	2.08E+01	1.91E+00	1	1	
32	15.369	18.094	4	2.23E+00	3.62E+01	2.23E+00	1	1	
94	15.517	18.257	1	3.57E+00	1.90E+02	3.57E+00	1	1	
95	15.626	18.194	33	2.06E+00	8.60E+01	2.06E+00	1	1	
96	15.529	18.169	7	2.21E+00	6.81E+01	2.21E+00	1	1	
97	15.607	18.398	28	2.02E+01	1.58E+03	2.02E+01	2	1	
98	15.562	18.363	5	5.33E+00	2.77E+02	5.33E+00	2	1	
133	15.733	18.328	9	6.14E-01	8.54E+01	6.14E-01	1	1	
137	15.561	17.979	6	1.48E+00	1.26E+01	1.48E+00	1	1	
138	15.585	18.218	2	2.89E+00	1.39E+02	2.89E+00	1	1	
140	15.641	18.402	24	1.08E+01	4.21E+02	1.08E+01	2	1	
141	15.601	18.327	10	1.88E+01	7.71E+02	1.88E+01	2	1	
143	15.719	18.229	16	1.72E+00	1.08E+02	1.72E+00	1	1	
144	15.555	18.123	4	2.04E+00	3.83E+01	2.04E+00	1	1	
203	15.677	18.330	1	3.31E+00	2.50E+02	3.31E+00	1	1	
220	15.484	18.048	3	2.00E+00	2.63E+01	2.00E+00	1	1	
238	15.612	17.946	2	1.54E+00	9.90E+00	1.54E+00	1	1	

Case 2b: Protected (Skin
Exposure)

24 rounds at aimpoint (15.35, 18.90)									
20	15.732	18.428	7	1.06E+01	2.87E+02	4.21E+02			4
23	15.640	18.125	6	1.08E+01	1.18E+02	1.79E+02			3
24	15.675	18.447	4	2.98E+01	7.69E+02	1.13E+03			6
25	15.684	18.075	1	9.93E+00	9.42E+01	1.45E+02			3
26	15.384	17.995	5	6.79E+00	4.44E+01	7.02E+01			2
27	15.405	18.172	4	4.45E+01	2.94E+02	4.65E+02			4
28	15.433	18.082	4	9.73E+00	9.24E+01	1.42E+02			3
29	15.452	18.232	4	2.39E+01	2.29E+02	3.51E+02			4
30	15.476	18.303	5	4.04E+01	5.69E+02	8.53E+02			6
31	15.526	18.028	4	8.04E+00	5.96E+01	9.32E+01			2
32	15.369	18.094	4	1.01E+01	1.04E+02	1.59E+02			3
94	15.517	18.257	1	7.26E+01	5.44E+02	8.50E+02			6
95	15.626	18.194	33	2.06E+01	2.46E+02	3.72E+02			4
96	15.529	18.169	7	1.62E+01	1.95E+02	2.95E+02			4
97	15.607	18.398	28	2.60E+02	4.53E+03	6.73E+03			8
98	15.562	18.363	5	1.05E+02	7.92E+02	1.24E+03			6
133	15.733	18.328	9	9.93E+00	2.44E+02	3.59E+02			4
137	15.561	17.979	6	5.43E+00	3.61E+01	5.70E+01			2
138	15.585	18.218	2	5.74E+01	3.98E+02	6.26E+02			5
140	15.641	18.402	24	1.64E+02	1.20E+03	1.88E+03			7
141	15.601	18.327	10	2.61E+02	2.21E+03	3.42E+03			7
143	15.719	18.229	16	4.07E+01	3.10E+02	4.84E+02			4
144	15.555	18.123	4	1.01E+01	1.09E+02	1.66E+02			3
203	15.677	18.330	1	5.25E+01	7.16E+02	1.08E+03			6
220	15.484	18.048	3	9.19E+00	7.52E+01	1.17E+02			3
238	15.612	17.946	2	5.25E+00	2.83E+01	4.57E+01			2

Mustard (HD) 250kg TBM
Light Attack
Height of Release: 500m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (15.60, 18.75)									
20	15.732	18.428	7	6.03E-01	2.85E+00	4.67E+00	1	1	1
23	15.640	18.125	6	3.29E+01	8.95E+01	1.61E+02	2	1	3

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

24	15.675	18.447	4	2.60E+01	7.22E+01	1.29E+02	2	1	3
25	15.684	18.075	1	1.19E+01	3.01E+01	5.49E+01	2	1	2
26	15.384	17.995	5	2.08E-04	5.71E-01	8.16E-01	1	1	1
27	15.405	18.172	4	1.25E+00	4.11E+00	7.12E+00	1	1	1
28	15.433	18.082	4	2.66E+00	6.07E+00	1.13E+01	1	1	1
29	15.452	18.232	4	6.21E+00	1.86E+01	3.28E+01	2	1	2
30	15.476	18.303	5	1.08E+01	3.29E+01	5.78E+01	2	1	2
31	15.526	18.028	4	7.66E+00	1.66E+01	3.14E+01	2	1	2
32	15.369	18.094	4	2.42E-04	9.23E-01	1.32E+00	1	1	1
94	15.517	18.257	1	4.58E+01	1.37E+02	2.42E+02	2	1	3
95	15.626	18.194	33	7.17E+01	2.10E+02	3.72E+02	4	3	4
96	15.529	18.169	7	3.44E+01	9.87E+01	1.75E+02	2	1	3
97	15.607	18.398	28	6.67E+02	1.33E+03	2.57E+03	6	6	7
98	15.562	18.363	5	3.24E+02	6.43E+02	1.24E+03	6	6	6
133	15.733	18.328	9	6.72E+00	2.08E+01	3.64E+01	2	1	2
137	15.561	17.979	6	5.26E+00	9.27E+00	1.85E+01	2	1	1
138	15.585	18.218	2	1.08E+02	2.76E+02	5.02E+02	5	4	5
140	15.641	18.402	24	3.42E+02	6.85E+02	1.32E+03	6	6	6
141	15.601	18.327	10	3.17E+02	7.95E+02	1.45E+03	6	6	6
143	15.719	18.229	16	1.62E+01	4.96E+01	8.71E+01	2	1	2
144	15.555	18.123	4	3.07E+01	8.31E+01	1.49E+02	2	1	3
203	15.677	18.330	1	7.70E+01	1.89E+02	3.47E+02	4	3	4
220	15.484	18.048	3	5.83E+00	1.22E+01	2.33E+01	2	1	1
238	15.612	17.946	2	4.06E+00	5.25E+00	1.16E+01	1	1	1

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

1 round at aimpoint (16.20, 16.70)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
1 round at aimpoint (16.20, 16.70)									
16	16.187	16.658	4	2.04E-05	8.69E+01	1.24E+02			3
129	16.188	16.473	40	1.13E+00	1.70E+03	2.43E+03			7
189	16.264	16.500	4	0.00E+00	1.44E+01	2.06E+01			1
209	16.134	16.486	1	0.00E+00	1.41E+01	2.01E+01			1

Mustard (HD) 500kg TBM
Moderate Attack
Height of Release: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (15.25, 19.30)									
8	15.018	18.957	5	3.01E+02	6.38E+02	1.21E+03	6	6	6
9	14.935	19.036	1	9.08E+02	1.75E+03	3.41E+03	6	6	7
10	15.059	19.065	2	9.20E+00	1.01E+01	2.36E+01	2	1	1
20	15.732	18.428	7	2.19E+01	5.52E+01	1.01E+02	2	1	3
23	15.640	18.125	6	5.28E+01	1.36E+02	2.47E+02	3	2	3
24	15.675	18.447	4	1.34E+02	2.91E+02	5.50E+02	5	4	5
25	15.684	18.075	1	2.52E+01	6.38E+01	1.16E+02	2	1	3
26	15.384	17.995	5	5.08E+00	9.74E+00	1.90E+01	2	1	1
27	15.405	18.172	4	1.41E+01	3.89E+01	6.97E+01	2	1	2
28	15.433	18.082	4	1.67E+01	4.12E+01	7.56E+01	2	1	2
29	15.452	18.232	4	4.11E+01	1.10E+02	1.98E+02	2	1	3
30	15.476	18.303	5	8.33E+01	2.14E+02	3.89E+02	4	3	4
31	15.526	18.028	4	2.61E+01	6.25E+01	1.15E+02	2	1	3
32	15.369	18.094	4	5.99E+00	1.50E+01	2.74E+01	2	1	2
94	15.517	18.257	1	1.23E+02	2.98E+02	5.49E+02	5	4	5
95	15.626	18.194	33	9.40E+01	2.32E+02	4.25E+02	4	3	4
96	15.529	18.169	7	8.08E+01	1.98E+02	3.64E+02	4	3	4
97	15.607	18.398	28	3.57E+02	7.72E+02	1.46E+03	6	6	6
98	15.562	18.363	5	3.04E+02	6.78E+02	1.27E+03	6	6	6
119	15.063	18.848	4	8.96E+01	1.95E+02	3.68E+02	4	3	4
120	15.074	19.229	12	1.06E-03	0.00E+00	1.06E-03	1	1	1
122	15.000	19.241	2	5.93E+00	3.57E+00	1.10E+01	2	1	1
123	14.861	19.198	1	2.78E+00	6.15E-01	3.66E+00	1	1	1
124	15.107	19.036	1	5.37E-03	3.54E-01	5.11E-01	1	1	1
125	15.009	19.087	2	1.90E+02	3.16E+02	6.41E+02	6	5	5
126	14.890	19.069	1	1.36E+02	1.67E+02	3.75E+02	5	4	4

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

127	14.841	19.040	1	4.50E+00	7.52E+00	1.52E+01	1	1	1
128	15.124	19.175	4	5.13E-04	0.00E+00	5.13E-04	1	1	1
133	15.733	18.328	9	2.72E+01	7.17E+01	1.30E+02	2	1	3
137	15.561	17.979	6	1.96E+01	4.17E+01	7.92E+01	2	1	2
138	15.585	18.218	2	1.33E+02	3.15E+02	5.83E+02	5	4	5
140	15.641	18.402	24	2.39E+02	5.16E+02	9.76E+02	6	5	6
141	15.601	18.327	10	2.50E+02	5.82E+02	1.08E+03	6	6	6
143	15.719	18.229	16	3.20E+01	8.88E+01	1.59E+02	2	1	3
144	15.555	18.123	4	6.43E+01	1.62E+02	2.96E+02	3	2	4
203	15.677	18.330	1	1.03E+02	2.42E+02	4.49E+02	5	4	4
207	14.908	18.942	1	3.82E+02	8.13E+02	1.54E+03	6	6	7
208	14.822	18.948	1	1.30E+01	2.84E+01	5.36E+01	2	1	2
218	14.983	18.822	8	4.21E+02	9.21E+02	1.74E+03	6	6	7
219	14.925	18.819	5	3.78E+02	8.75E+02	1.63E+03	6	6	7
220	15.484	18.048	3	2.29E+01	5.60E+01	1.03E+02	2	1	3
225	15.036	18.722	4	1.33E+02	3.45E+02	6.26E+02	5	4	5
238	15.612	17.946	2	1.46E+01	2.66E+01	5.26E+01	2	1	2

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

2 rounds at aimpoint (15.55, 17.45)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
2 rounds at aimpoint (15.55, 17.45)									
17	15.252	17.386	4	2.94E-01	8.01E+02	1.14E+03			6
18	15.173	17.315	9	0.00E+00	1.73E+00	2.47E+00			1
72	15.153	17.386	2	0.00E+00	2.09E-02	2.99E-02			1
130	15.248	17.308	16	9.30E-01	1.51E+03	2.16E+03			7
134	15.206	17.396	10	2.57E-02	8.11E+01	1.16E+02			3

Mustard (HD) 500kg TBM
Heavy Attack
Height of Release: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
4 rounds at aimpoint (15.25, 19.60)									
8	15.018	18.957	5	1.42E+02	3.43E+02	6.32E+02	5	4	5
9	14.935	19.036	1	2.86E+02	6.68E+02	1.24E+03	6	6	6
10	15.059	19.065	2	9.19E+01	2.37E+02	4.30E+02	4	3	4
20	15.732	18.428	7	2.14E+01	5.75E+01	1.04E+02	2	1	3
23	15.640	18.125	6	7.69E+00	9.71E+00	2.16E+01	2	1	1
24	15.675	18.447	4	5.80E+01	1.48E+02	2.69E+02	3	2	4
25	15.684	18.075	1	3.37E+00	2.89E+00	7.50E+00	1	1	1
26	15.384	17.995	5	2.43E+01	4.93E+01	9.47E+01	2	1	2
27	15.405	18.172	4	9.60E+01	2.19E+02	4.09E+02	4	3	4
28	15.433	18.082	4	3.97E+01	9.12E+01	1.70E+02	2	1	3
29	15.452	18.232	4	9.80E+01	2.12E+02	4.01E+02	4	3	4
30	15.476	18.303	5	1.11E+02	2.42E+02	4.57E+02	5	4	4
31	15.526	18.028	4	1.21E+01	2.12E+01	4.24E+01	2	1	2
32	15.369	18.094	4	5.42E+01	1.33E+02	2.44E+02	3	2	3
82	15.413	19.029	3	4.57E+01	8.44E+01	1.66E+02	2	1	3
92	15.441	19.341	4	2.91E-07	0.00E+00	2.91E-07	1	1	1
94	15.517	18.257	1	5.79E+01	1.21E+02	2.31E+02	3	2	3
95	15.626	18.194	33	1.57E+01	2.45E+01	5.07E+01	2	1	2
96	15.529	18.169	7	2.98E+01	5.97E+01	1.15E+02	2	1	3
97	15.607	18.398	28	8.76E+01	2.03E+02	3.78E+02	4	3	4
98	15.562	18.363	5	8.94E+01	1.94E+02	3.67E+02	4	3	4
119	15.063	18.848	4	4.41E+01	1.22E+02	2.18E+02	2	1	3
120	15.074	19.229	12	3.94E+01	8.31E+01	1.58E+02	2	1	3
122	15.000	19.241	2	4.52E+02	9.53E+02	1.81E+03	6	6	7
123	14.861	19.198	1	9.38E+01	2.39E+02	4.35E+02	4	3	4
124	15.107	19.036	1	2.33E+01	6.73E+01	1.19E+02	2	1	3
125	15.009	19.087	2	2.88E+02	6.44E+02	1.21E+03	6	6	6
126	14.890	19.069	1	1.92E+02	4.86E+02	8.86E+02	6	5	6
127	14.841	19.040	1	6.35E+01	1.72E+02	3.09E+02	3	2	4
128	15.124	19.175	4	6.60E+00	1.59E+01	2.93E+01	2	1	2
133	15.733	18.328	9	1.36E+01	3.00E+01	5.65E+01	2	1	2
137	15.561	17.979	6	5.44E+00	7.73E+00	1.65E+01	2	1	1

Table E5
HD Exposure Estimates
Heavy Brigade, Brigade Support Area Task Force, Offense and Defense

138	15.585	18.218	2	2.61E+01	4.72E+01	9.35E+01	2	1	2
139	15.506	19.036	2	7.96E+02	2.14E+03	3.85E+03	6	6	7
140	15.641	18.402	24	6.49E+01	1.59E+02	2.92E+02	3	2	4
141	15.601	18.327	10	5.47E+01	1.19E+02	2.25E+02	3	2	3
143	15.719	18.229	16	8.54E+00	1.37E+01	2.81E+01	2	1	2
144	15.555	18.123	4	1.68E+01	2.90E+01	5.82E+01	2	1	2
203	15.677	18.330	1	2.86E+01	6.35E+01	1.19E+02	2	1	3
207	14.908	18.942	1	1.47E+02	3.57E+02	6.57E+02	5	4	5
208	14.822	18.948	1	4.13E+01	1.12E+02	2.01E+02	2	1	3
218	14.983	18.822	8	7.57E+01	1.92E+02	3.50E+02	4	3	4
219	14.925	18.819	5	7.31E+01	1.84E+02	3.36E+02	4	3	4
220	15.484	18.048	3	2.00E+01	4.20E+01	8.00E+01	2	1	2
225	15.036	18.722	4	2.68E+01	6.53E+01	1.20E+02	2	1	3
238	15.612	17.946	2	2.38E+00	2.18E+00	5.49E+00	1	1	1
4 rounds at aimpoint (15.55, 17.45)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
4 rounds at aimpoint (15.55, 17.45)									
17	15.252	17.386	4	3.91E-01	8.01E+02	1.14E+03			6
18	15.173	17.315	9	0.00E+00	1.73E+00	2.47E+00			1
72	15.153	17.386	2	0.00E+00	2.09E-02	2.99E-02			1
130	15.248	17.308	16	9.46E-01	1.51E+03	2.16E+03			7
134	15.206	17.396	10	3.96E-02	8.11E+01	1.16E+02			3

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

APPENDIX F

SUPPORT BRIGADE

Appendix F: Support Brigade

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Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
	Service Company SVC CSB				FOXH	455	5
					DISM	312	5
					DISM	311	5
					FOXH	453	5
					TENT	395	5
					TENT	388	5
					FOXH	456	5
					TENT	392	5
					TENT	394	5
					DISM	313	5
					TENT	390	5
					DISM	310	5
					TENT	391	5
					TENT	396	5
					FOXH	452	5
					FOXH	454	5
					TENT	393	5
					TENT	389	5
					TENT	406	5
					FOXH	421	5
					FOXH	420	5
	Train Company CSB				DISM	303	5
					TENT	403	5
					TENT	399	5
					TENT	405	5
					FOXH	458	5
					TENT	400	5
					DISM	302	5
					TENT	404	5
					TENT	401	5
					DISM	306	5
					FOXH	415	5
					TENT	402	5
					DISM	307	5
					VAN-	367	5
					FOXH	460	5
					FOXH	418	5
					DISM	305	5
					FOXH	459	5
					DISM	304	5
					FOXH	461	5
					DISM	308	5
					FOXH	417	5
					DISM	309	5
					DISM	290	1
					TENT	398	5
					TENT	397	5
					FOXH	416	5
					FOXH	419	5
	Repair & Maint Co. MSL				VAN-	85	5
					FOXH	187	5
					VAN-	91	5
					DISM	47	5
					TENT	126	5
					TENT	129	5
					VAN-	87	5
					FOXH	217	5
					TENT	131	5
					TENT	127	5
					FOXH	252	5
					TENT	130	5
					FOXH	218	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					TENT	132	5
					VAN-	92	5
					TENT	128	5
					FOXH	243	5
					VAN-	79	5
					VAN-	70	5
					VAN-	89	5
					FOXH	219	5
					FOXH	198	5
					FOXH	191	5
					FOXH	250	5
					VAN-	90	5
					VAN-	80	5
					DISM	1	1
					VAN-	83	5
	Transport Co. CSB				FOXH	430	5
					DISM	333	5
					DISM	328	5
					DISM	329	5
					DISM	318	5
					DISM	320	5
					FOXH	413	5
					DISM	332	5
					FOXH	426	5
					FOXH	425	5
					DISM	319	5
					DISM	322	5
					TENT	378	5
					DISM	326	5
					FOXH	448	5
					DISM	331	5
					FOXH	429	5
					DISM	323	5
					TENT	380	5
					DISM	327	5
					FOXH	428	5
					TENT	377	5
					FOXH	424	5
					TENT	376	5
					FOXH	427	5
					DISM	325	5
					FOXH	446	5
					TENT	379	5
					FOXH	447	5
					FOXH	423	5
					FOXH	431	5
					DISM	321	5
					DISM	330	5
					DISM	324	5
CSB Hq Bn					DISM	316	5
					DISM	315	5
					TENT	408	5
					FOXH	462	5
					FOXH	445	5
					FOXH	457	5
					DISM	314	5
					FOXH	410	5
					TENT	375	5
					FOXH	422	5
					TENT	407	5
					DISM	317	5
					TENT	374	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
MI Bn					TENT	102	5
					TENT	108	5
					DISM	3	2
					TENT	106	5
					FOXH	204	5
					TENT	143	5
					DISM	48	5
					TENT	109	5
					DISM	53	5
					DISM	59	5
					TENT	105	5
					TENT	100	5
					TENT	112	5
					FOXH	210	5
					TENT	113	5
					FOXH	193	5
					TENT	119	5
					TENT	111	5
					FOXH	209	5
					DISM	56	5
					FOXH	208	5
					FOXH	213	5
					TENT	110	5
					DISM	52	5
					FOXH	206	5
					TENT	115	5
					FOXH	196	5
					DISM	58	5
					DISM	55	5
					TENT	116	5
					DISM	57	5
					TENT	117	5
					FOXH	197	5
					FOXH	212	5
					FOXH	207	5
					TENT	114	5
					TENT	118	5
					TENT	103	5
					FOXH	211	5
					TENT	107	5
					DISM	54	5
					DISM	60	5
					TENT	101	5
					TENT	276	5
					TENT	104	5
					FOXH	284	5
					VAN-	259	5
					DISM	49	5
					DISM	253	5
					DISM	254	5
					DISM	50	5
					TENT	262	5
					FOXH	283	5
					TENT	261	5
					FOXH	289	5
					FOXH	195	5
					TENT	274	5
					TENT	277	5
					FOXH	288	5
					FOXH	281	5
					FOXH	280	5
					TENT	272	5
					TENT	275	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					FOXH	286	5
					TENT	260	5
					DISM	256	5
					FOXH	278	5
		Signal Platoon			VAN-	257	5
					TENT	266	5
					VAN-	258	5
					TENT	264	5
					FOXH	287	5
	DS CSB Repair & Maint Co				DISM	298	5
					FOXH	449	5
					DISM	299	5
					DISM	300	5
					FOXH	451	5
					TENT	384	5
					VAN-	358	5
					VAN-	365	5
					FOXH	468	5
					FOXH	450	5
					TENT	387	5
					TENT	381	5
					FOXH	463	5
					FOXH	469	5
					VAN-	363	5
					TENT	382	5
					TENT	386	5
					TENT	385	5
					VAN-	366	5
					VAN-	361	5
					VAN-	356	5
					FOXH	464	5
					TENT	383	5
					VAN-	369	5
					FOXH	467	5
					VAN-	360	5
					VAN-	368	5
					FOXH	465	5
					VAN-	357	5
					FOXH	466	5
					VAN-	362	5
					VAN-	359	5
					VAN-	364	5
					FOXH	414	5
					DISM	301	5
	LT Repair & Maint Co				FOXH	234	5
					FOXH	171	5
					DISM	5	3
					TENT	168	5
					TENT	166	5
					TENT	155	5
					TENT	152	5
					TENT	164	5
					FOXH	236	5
					FOXH	231	5
					FOXH	237	5
					FOXH	233	5
					TENT	162	5
					FOXH	170	5
					TENT	157	5
					TENT	167	5
					FOXH	232	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					TENT	161	5
					TENT	154	5
					TENT	156	5
					TENT	163	5
					TENT	165	5
					TENT	159	5
					DISM	6	4
					DISM	7	5
	Medical Co				VAN-	82	5
					FOXH	203	5
					FOXH	245	5
					TENT	93	5
					DISM	9	5
					VAN-	76	5
					TENT	94	5
					VAN-	72	5
					FOXH	242	5
					DISM	13	5
					DISM	8	5
					DISM	62	5
					FOXH	199	5
					VAN-	86	5
					FOXH	248	5
					FOXH	235	5
					FOXH	200	5
					VAN-	69	5
					FOXH	246	5
					TENT	98	5
					VAN-	71	5
					FOXH	247	5
					FOXH	240	5
					VAN-	68	5
					VAN-	75	5
					VAN-	74	5
					DISM	61	5
					FOXH	249	5
					VAN-	84	5
					DISM	11	5
					TENT	99	5
					VAN-	77	5
					TENT	158	5
					FOXH	241	5
					TENT	160	5
					VAN-	73	5
					FOXH	169	5
					VAN-	81	5
					VAN-	78	5
					FOXH	244	5
					TENT	95	5
					FOXH	172	5
	SPT Div and Mech Inf Div HQ				TENT	263	5
					TENT	267	5
					DISM	255	5
					FOXH	285	5
					FOXH	282	5
					TENT	273	5
					TENT	265	5
					FOXH	279	5
	CBR Co (less detachments)				TENT	269	5
					TENT	270	5
					TENT	271	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					TENT	268	5
	HVY Repair & Maint Co				TENT	133	5
					TENT	123	5
					FOXH	220	5
					DISM	41	5
					TENT	121	5
					TENT	125	5
					TENT	120	5
					FOXH	216	5
					FOXH	214	5
					TENT	122	5
					TENT	124	5
					DISM	46	5
					FOXH	215	5
					DISM	42	5
					FOXH	189	5
					FOXH	205	5
					FOXH	238	5
					VAN-	65	5
					FOXH	239	5
					DISM	44	5
					FOXH	190	5
					VAN-	63	5
					FOXH	188	5
					VAN-	67	5
					VAN-	66	5
					DISM	43	5
					VAN-	64	5
					VAN-	88	5
					DISM	39	5
					FOXH	251	5
					DISM	45	5
	SPT MAIN Btln HQ				TENT	96	5
					DISM	4	3
					DISM	35	5
					DISM	40	5
					FOXH	186	5
					DISM	37	5
					FOXH	201	5
					TENT	153	5
					FOXH	192	5
					FOXH	202	5
					TENT	97	5
					FOXH	230	5
					TENT	151	5
					DISM	51	5
					FOXH	229	5
	Transport Co				DISM	34	5
					FOXH	184	5
					DISM	27	5
					FOXH	180	5
					TENT	134	5
					DISM	32	5
					DISM	30	5
					FOXH	178	5
					DISM	12	5
					DISM	21	5
					DISM	28	5
					FOXH	222	5
					DISM	23	5
					DISM	18	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					DISM	14	5
					DISM	19	5
					FOXH	179	5
					DISM	36	5
					TENT	144	5
					DISM	10	5
					FOXH	225	5
					TENT	135	5
					FOXH	181	5
					DISM	31	5
					FOXH	221	5
					TENT	141	5
					FOXH	182	5
					TENT	140	5
					DISM	26	5
					TENT	137	5
					DISM	29	5
					FOXH	174	5
					DISM	33	5
					DISM	2	2
					FOXH	185	5
					FOXH	224	5
	SVC Co				DISM	20	5
					DISM	25	5
					TENT	148	5
					FOXH	173	5
					FOXH	175	5
					DISM	15	5
					DISM	16	5
					TENT	136	5
					FOXH	226	5
					TENT	149	5
					TENT	138	5
					DISM	17	5
					TENT	145	5
					DISM	38	5
					TENT	146	5
					TENT	142	5
					TENT	147	5
					FOXH	228	5
					FOXH	194	5
					FOXH	183	5
					FOXH	227	5
					DISM	24	5
					FOXH	176	5
					FOXH	223	5
					DISM	22	5
					TENT	150	5
					FOXH	177	5
					TENT	139	5
					Icons outside of unit area:		
					DISM	291	1
					DISM	292	1
					DISM	293	2
					DISM	294	4
					DISM	295	5
					DISM	296	5
					DISM	297	5
					DISM	334	5
					DISM	335	5
					DISM	336	5
					DISM	337	5

Table F1
Brigade Description by Tactical Layout
Support Brigade

Battalion	Company	Platoon	Section	Element/Team/ Squad	Vehicle	Icon #	Crew
					DISM	338	5
					DISM	339	5
					DISM	340	5
					DISM	341	5
					DISM	342	5
					DISM	343	5
					DISM	344	5
					DISM	345	5
					DISM	346	5
					DISM	347	5
					DISM	348	5
					DISM	349	5
					DISM	350	5
					DISM	351	5
					DISM	352	5
					DISM	353	5
					DISM	354	5
					DISM	355	5
					TENT	370	5
					TENT	371	5
					TENT	372	5
					TENT	373	5
					TENT	409	5
					FOXH	411	5
					FOXH	412	5
					FOXH	432	5
					FOXH	433	5
					FOXH	434	5
					FOXH	435	5
					FOXH	436	5
					FOXH	437	5
					FOXH	438	5
					FOXH	439	5
					FOXH	440	5
					FOXH	441	5
					FOXH	442	5
					FOXH	443	5
					FOXH	444	5

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
1	18.436	22.418	1	DISM	Support Brigade		Repair & Maint Co. MSL					
2	18.822	27.915	2	DISM	Support Brigade		Transport Co					
3	17.181	23.524	2	DISM	Support Brigade	MI Bn						
4	18.493	25.22	3	DISM	Support Brigade		SPT MAIN Btl HQ					
5	16.903	27.198	3	DISM	Support Brigade		LT Repair & Maint Co					
6	16.187	27.848	4	DISM	Support Brigade		LT Repair & Maint Co					
7	16.933	27.851	5	DISM	Support Brigade		LT Repair & Maint Co					
8	17.462	26.876	5	DISM	Support Brigade		Medical Co					
9	17.366	26.775	5	DISM	Support Brigade		Medical Co					
10	18.147	27.56	5	DISM	Support Brigade		Transport Co					
11	17.742	26.629	5	DISM	Support Brigade		Medical Co					
12	18.13	27.247	5	DISM	Support Brigade		Transport Co					
13	17.46	26.751	5	DISM	Support Brigade		Medical Co					
14	18.595	27.455	5	DISM	Support Brigade		Transport Co					
15	19.307	26.354	5	DISM	Support Brigade		SVC Co					
16	19.346	25.56	5	DISM	Support Brigade		SVC Co					
17	19.516	26.029	5	DISM	Support Brigade		SVC Co					
18	18.42	27.447	5	DISM	Support Brigade		Transport Co					
19	18.212	27.476	5	DISM	Support Brigade		Transport Co					
20	19.204	26.454	5	DISM	Support Brigade		SVC Co					
21	18.222	27.296	5	DISM	Support Brigade		Transport Co					
22	19.922	25.515	5	DISM	Support Brigade		SVC Co					
23	18.087	27.398	5	DISM	Support Brigade		Transport Co					
24	19.801	25.844	5	DISM	Support Brigade		SVC Co					
25	19.21	25.865	5	DISM	Support Brigade		SVC Co					
26	18.329	27.823	5	DISM	Support Brigade		Transport Co					
27	18.712	27.105	5	DISM	Support Brigade		Transport Co					
28	18.856	27.306	5	DISM	Support Brigade		Transport Co					
29	18.374	27.844	5	DISM	Support Brigade		Transport Co					
30	18.405	27.22	5	DISM	Support Brigade		Transport Co					
31	18.118	27.716	5	DISM	Support Brigade		Transport Co					
32	18.658	27.207	5	DISM	Support Brigade		Transport Co					
33	18.081	27.914	5	DISM	Support Brigade		Transport Co					
34	18.942	27.051	5	DISM	Support Brigade		Transport Co					
35	18.597	25.229	5	DISM	Support Brigade		SPT MAIN Btl HQ					
36	18.52	27.504	5	DISM	Support Brigade		Transport Co					
37	18.503	25.254	5	DISM	Support Brigade		SPT MAIN Btl HQ					
38	19.604	25.703	5	DISM	Support Brigade		SVC Co					
39	18.591	24.662	5	DISM	Support Brigade		HVY Repair & Maint Co					
40	18.651	25.229	5	DISM	Support Brigade		SPT MAIN Btl HQ					
41	18.896	23.788	5	DISM	Support Brigade		HVY Repair & Maint Co					
42	18.853	24.109	5	DISM	Support Brigade		HVY Repair & Maint Co					
43	18.892	24.476	5	DISM	Support Brigade		HVY Repair & Maint Co					
44	18.936	24.319	5	DISM	Support Brigade		HVY Repair & Maint Co					
45	18.777	24.732	5	DISM	Support Brigade		HVY Repair & Maint Co					
46	18.921	24.089	5	DISM	Support Brigade		HVY Repair & Maint Co					
47	17.923	22.204	5	DISM	Support Brigade		Repair & Maint Co. MSL					
48	17.187	23.651	5	DISM	Support Brigade	MI Bn						
49	17.468	24.443	5	DISM	Support Brigade	MI Bn						
50	17.487	24.398	5	DISM	Support Brigade	MI Bn						
51	18.556	25.363	5	DISM	Support Brigade		SPT MAIN Btl HQ					
52	17.293	24.34	5	DISM	Support Brigade	MI Bn						
53	17.202	24.669	5	DISM	Support Brigade	MI Bn						
54	17.418	24.675	5	DISM	Support Brigade	MI Bn						
55	17.339	24.697	5	DISM	Support Brigade	MI Bn						
56	17.274	24.597	5	DISM	Support Brigade	MI Bn						
57	17.347	24.131	5	DISM	Support Brigade	MI Bn						
58	17.336	24.001	5	DISM	Support Brigade	MI Bn						
59	17.205	23.842	5	DISM	Support Brigade	MI Bn						
60	17.421	24.329	5	DISM	Support Brigade	MI Bn						
61	17.701	26.488	5	DISM	Support Brigade		Medical Co					
62	17.464	26.662	5	DISM	Support Brigade		Medical Co					
63	18.818	24.344	5	VAN-	Support Brigade		HVY Repair & Maint Co					
64	18.63	24.478	5	VAN-	Support Brigade		HVY Repair & Maint Co					
65	18.806	24.225	5	VAN-	Support Brigade		HVY Repair & Maint Co					
66	18.725	24.47	5	VAN-	Support Brigade		HVY Repair & Maint Co					
67	18.548	24.46	5	VAN-	Support Brigade		HVY Repair & Maint Co					
68	17.659	26.754	5	VAN-	Support Brigade		Medical Co					
69	17.555	26.861	5	VAN-	Support Brigade		Medical Co					
70	18.282	22.39	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
71	17.598	26.569	5	VAN-	Support Brigade		Medical Co					
72	17.445	26.254	5	VAN-	Support Brigade		Medical Co					
73	17.815	26.257	5	VAN-	Support Brigade		Medical Co					
74	17.693	26.866	5	VAN-	Support Brigade		Medical Co					
75	17.678	26.639	5	VAN-	Support Brigade		Medical Co					
76	17.409	26.724	5	VAN-	Support Brigade		Medical Co					
77	17.784	26.491	5	VAN-	Support Brigade		Medical Co					
78	17.875	26.374	5	VAN-	Support Brigade		Medical Co					
79	18.238	22.525	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
80	18.435	22.682	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
81	17.87	26.656	5	VAN-	Support Brigade		Medical Co					
82	17.332	26.414	5	VAN-	Support Brigade		Medical Co					

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
83	18.456	22.521	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
84	17.736	26.324	5	VAN-	Support Brigade		Medical Co					
85	17.884	22.396	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
86	17.487	26.466	5	VAN-	Support Brigade		Medical Co					
87	17.977	22.662	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
88	18.843	24.53	5	VAN-	Support Brigade		HVY Repair & Maint Co					
89	18.29	22.615	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
90	18.43	22.295	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
91	17.898	22.639	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
92	18.185	22.679	5	VAN-	Support Brigade		Repair & Maint Co. MSL					
93	17.348	26.251	5	TENT	Support Brigade		Medical Co					
94	17.418	26.441	5	TENT	Support Brigade		Medical Co					
95	17.937	26.836	5	TENT	Support Brigade		Medical Co					
96	18.54	25.208	5	TENT	Support Brigade		SPT MAIN Btl HQ					
97	18.546	25.327	5	TENT	Support Brigade		SPT MAIN Btl HQ					
98	17.59	26.733	5	TENT	Support Brigade		Medical Co					
99	17.775	26.941	5	TENT	Support Brigade		Medical Co					
100	17.232	23.912	5	TENT	Support Brigade	MI Bn						
101	17.439	24.597	5	TENT	Support Brigade	MI Bn						
102	17.175	24.255	5	TENT	Support Brigade	MI Bn						
103	17.359	24.059	5	TENT	Support Brigade	MI Bn						
104	17.452	24.521	5	TENT	Support Brigade	MI Bn						
105	17.223	23.804	5	TENT	Support Brigade	MI Bn						
106	17.181	24.103	5	TENT	Support Brigade	MI Bn						
107	17.369	24.259	5	TENT	Support Brigade	MI Bn						
108	17.177	24.439	5	TENT	Support Brigade	MI Bn						
109	17.196	24.503	5	TENT	Support Brigade	MI Bn						
110	17.283	23.842	5	TENT	Support Brigade	MI Bn						
111	17.266	23.993	5	TENT	Support Brigade	MI Bn						
112	17.244	24.171	5	TENT	Support Brigade	MI Bn						
113	17.262	24.275	5	TENT	Support Brigade	MI Bn						
114	17.357	23.679	5	TENT	Support Brigade	MI Bn						
115	17.323	24.549	5	TENT	Support Brigade	MI Bn						
116	17.342	23.597	5	TENT	Support Brigade	MI Bn						
117	17.349	23.785	5	TENT	Support Brigade	MI Bn						
118	17.359	23.524	5	TENT	Support Brigade	MI Bn						
119	17.263	24.484	5	TENT	Support Brigade	MI Bn						
120	18.546	23.924	5	TENT	Support Brigade		HVY Repair & Maint Co					
121	18.621	23.802	5	TENT	Support Brigade		HVY Repair & Maint Co					
122	18.534	24.025	5	TENT	Support Brigade		HVY Repair & Maint Co					
123	18.669	23.711	5	TENT	Support Brigade		HVY Repair & Maint Co					
124	18.708	24.08	5	TENT	Support Brigade		HVY Repair & Maint Co					
125	18.731	23.867	5	TENT	Support Brigade		HVY Repair & Maint Co					
126	17.927	22.304	5	TENT	Support Brigade		Repair & Maint Co. MSL					
127	18.068	22.411	5	TENT	Support Brigade		Repair & Maint Co. MSL					
128	18.221	22.341	5	TENT	Support Brigade		Repair & Maint Co. MSL					
129	17.95	22.413	5	TENT	Support Brigade		Repair & Maint Co. MSL					
130	18.113	22.192	5	TENT	Support Brigade		Repair & Maint Co. MSL					
131	18.022	22.275	5	TENT	Support Brigade		Repair & Maint Co. MSL					
132	18.15	22.445	5	TENT	Support Brigade		Repair & Maint Co. MSL					
133	18.565	23.665	5	TENT	Support Brigade		HVY Repair & Maint Co					
134	18.225	27.128	5	TENT	Support Brigade		Transport Co					
135	18.771	27.659	5	TENT	Support Brigade		Transport Co					
136	19.391	25.944	5	TENT	Support Brigade		SVC Co					
137	18.697	27.843	5	TENT	Support Brigade		Transport Co					
138	19.49	25.738	5	TENT	Support Brigade		SVC Co					
139	19.977	26.068	5	TENT	Support Brigade		SVC Co					
140	18.87	27.815	5	TENT	Support Brigade		Transport Co					
141	18.922	27.754	5	TENT	Support Brigade		Transport Co					
142	19.639	26.15	5	TENT	Support Brigade		SVC Co					
143	17.185	23.996	5	TENT	Support Brigade	MI Bn						
144	18.88	27.544	5	TENT	Support Brigade		Transport Co					
145	19.581	26.027	5	TENT	Support Brigade		SVC Co					
146	19.614	25.895	5	TENT	Support Brigade		SVC Co					
147	19.643	26.386	5	TENT	Support Brigade		SVC Co					
148	19.216	25.692	5	TENT	Support Brigade		SVC Co					
149	19.465	26.307	5	TENT	Support Brigade		SVC Co					
150	19.927	26.258	5	TENT	Support Brigade		SVC Co					
151	18.507	25.357	5	TENT	Support Brigade		SPT MAIN Btl HQ					
152	16.665	27.318	5	TENT	Support Brigade		LT Repair & Maint Co					
153	18.624	25.296	5	TENT	Support Brigade		SPT MAIN Btl HQ					
154	16.322	27.631	5	TENT	Support Brigade		LT Repair & Maint Co					
155	16.806	27.29	5	TENT	Support Brigade		LT Repair & Maint Co					
156	16.694	27.671	5	TENT	Support Brigade		LT Repair & Maint Co					
157	16.339	27.501	5	TENT	Support Brigade		LT Repair & Maint Co					
158	17.797	26.587	5	TENT	Support Brigade		Medical Co					
159	16.429	27.796	5	TENT	Support Brigade		LT Repair & Maint Co					
160	17.812	26.724	5	TENT	Support Brigade		Medical Co					
161	16.602	27.614	5	TENT	Support Brigade		LT Repair & Maint Co					
162	16.76	27.488	5	TENT	Support Brigade		LT Repair & Maint Co					
163	16.662	27.76	5	TENT	Support Brigade		LT Repair & Maint Co					
164	16.336	27.323	5	TENT	Support Brigade		LT Repair & Maint Co					

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
165	16.855	27.789	5	TENT	Support Brigade		LT Repair & Maint Co					
166	16.41	27.214	5	TENT	Support Brigade		LT Repair & Maint Co					
167	16.907	27.604	5	TENT	Support Brigade		LT Repair & Maint Co					
168	16.75	27.212	5	TENT	Support Brigade		LT Repair & Maint Co					
169	17.864	26.943	5	FOXH	Support Brigade		Medical Co					
170	16.489	27.49	5	FOXH	Support Brigade		LT Repair & Maint Co					
171	16.207	27.194	5	FOXH	Support Brigade		LT Repair & Maint Co					
172	17.953	26.234	5	FOXH	Support Brigade		Medical Co					
173	19.274	26.128	5	FOXH	Support Brigade		SVC Co					
174	18.25	27.882	5	FOXH	Support Brigade		Transport Co					
175	19.286	25.957	5	FOXH	Support Brigade		SVC Co					
176	19.865	26.006	5	FOXH	Support Brigade		SVC Co					
177	19.951	26.469	5	FOXH	Support Brigade		SVC Co					
178	18.548	27.223	5	FOXH	Support Brigade		Transport Co					
179	18.791	27.502	5	FOXH	Support Brigade		Transport Co					
180	18.355	27.121	5	FOXH	Support Brigade		Transport Co					
181	18.384	27.661	5	FOXH	Support Brigade		Transport Co					
182	18.585	27.791	5	FOXH	Support Brigade		Transport Co					
183	19.771	26.216	5	FOXH	Support Brigade		SVC Co					
184	18.05	27.077	5	FOXH	Support Brigade		Transport Co					
185	18.939	27.956	5	FOXH	Support Brigade		Transport Co					
186	18.456	25.249	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
187	17.885	22.726	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
188	18.802	24.452	5	FOXH	Support Brigade		HVY Repair & Maint Co					
189	18.711	24.196	5	FOXH	Support Brigade		HVY Repair & Maint Co					
190	18.65	24.342	5	FOXH	Support Brigade		HVY Repair & Maint Co					
191	18.361	22.159	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
192	18.459	25.309	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
193	17.263	23.765	5	FOXH	Support Brigade	MI Bn						
194	19.7	25.769	5	FOXH	Support Brigade		SVC Co					
195	17.552	24.359	5	FOXH	Support Brigade	MI Bn						
196	17.329	24.294	5	FOXH	Support Brigade	MI Bn						
197	17.35	24.467	5	FOXH	Support Brigade	MI Bn						
198	18.347	22.723	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
199	17.47	26.332	5	FOXH	Support Brigade		Medical Co					
200	17.542	26.309	5	FOXH	Support Brigade		Medical Co					
201	18.562	25.274	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
202	18.502	25.317	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
203	17.342	26.573	5	FOXH	Support Brigade		Medical Co					
204	17.183	24.37	5	FOXH	Support Brigade	MI Bn						
205	18.626	24.203	5	FOXH	Support Brigade		HVY Repair & Maint Co					
206	17.314	24.187	5	FOXH	Support Brigade	MI Bn						
207	17.355	23.946	5	FOXH	Support Brigade	MI Bn						
208	17.275	23.609	5	FOXH	Support Brigade	MI Bn						
209	17.266	24.069	5	FOXH	Support Brigade	MI Bn						
210	17.248	24.378	5	FOXH	Support Brigade	MI Bn						
211	17.359	24.366	5	FOXH	Support Brigade	MI Bn						
212	17.355	23.859	5	FOXH	Support Brigade	MI Bn						
213	17.275	23.713	5	FOXH	Support Brigade	MI Bn						
214	18.619	23.957	5	FOXH	Support Brigade		HVY Repair & Maint Co					
215	18.642	24.09	5	FOXH	Support Brigade		HVY Repair & Maint Co					
216	18.7	23.951	5	FOXH	Support Brigade		HVY Repair & Maint Co					
217	17.997	22.157	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
218	18.129	22.348	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
219	18.331	22.261	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
220	18.528	23.774	5	FOXH	Support Brigade		HVY Repair & Maint Co					
221	18.643	27.723	5	FOXH	Support Brigade		Transport Co					
222	18.654	27.351	5	FOXH	Support Brigade		Transport Co					
223	19.907	25.684	5	FOXH	Support Brigade		SVC Co					
224	18.748	27.965	5	FOXH	Support Brigade		Transport Co					
225	18.26	27.647	5	FOXH	Support Brigade		Transport Co					
226	19.404	26.126	5	FOXH	Support Brigade		SVC Co					
227	19.797	26.424	5	FOXH	Support Brigade		SVC Co					
228	19.688	26.01	5	FOXH	Support Brigade		SVC Co					
229	18.608	25.375	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
230	18.643	25.342	5	FOXH	Support Brigade		SPT MAIN Btln HQ					
231	16.443	27.359	5	FOXH	Support Brigade		LT Repair & Maint Co					
232	16.422	27.614	5	FOXH	Support Brigade		LT Repair & Maint Co					
233	16.534	27.462	5	FOXH	Support Brigade		LT Repair & Maint Co					
234	16.311	27.134	5	FOXH	Support Brigade		LT Repair & Maint Co					
235	17.54	26.653	5	FOXH	Support Brigade		Medical Co					
236	16.567	27.342	5	FOXH	Support Brigade		LT Repair & Maint Co					
237	16.705	27.433	5	FOXH	Support Brigade		LT Repair & Maint Co					
238	18.533	24.214	5	FOXH	Support Brigade		HVY Repair & Maint Co					
239	18.727	24.309	5	FOXH	Support Brigade		HVY Repair & Maint Co					
240	17.624	26.382	5	FOXH	Support Brigade		Medical Co					
241	17.803	26.836	5	FOXH	Support Brigade		Medical Co					
242	17.453	26.585	5	FOXH	Support Brigade		Medical Co					
243	18.226	22.183	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
244	17.886	26.503	5	FOXH	Support Brigade		Medical Co					
245	17.342	26.693	5	FOXH	Support Brigade		Medical Co					
246	17.56	26.496	5	FOXH	Support Brigade		Medical Co					

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
247	17.618	26.228	5	FOXH	Support Brigade		Medical Co					
248	17.528	26.754	5	FOXH	Support Brigade		Medical Co					
249	17.733	26.756	5	FOXH	Support Brigade		Medical Co					
250	18.375	22.578	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
251	18.839	24.693	5	FOXH	Support Brigade		HVY Repair & Maint Co					
252	18.082	22.652	5	FOXH	Support Brigade		Repair & Maint Co. MSL					
253	17.471	24.264	5	DISM	Support Brigade	MI Bn						
254	17.479	23.766	5	DISM	Support Brigade	MI Bn						
255	18.303	23.109	5	DISM	Support Brigade		SPT Div and Mech Inf Div HQ					
256	17.694	23.745	5	DISM	Support Brigade	MI Bn						
257	17.825	23.345	5	VAN-	Support Brigade			Signal Platoon				
258	17.872	23.363	5	VAN-	Support Brigade			Signal Platoon				
259	17.464	24.139	5	VAN-	Support Brigade	MI Bn						
260	17.671	24.255	5	TENT	Support Brigade	MI Bn						
261	17.537	24.105	5	TENT	Support Brigade	MI Bn						
262	17.535	24.181	5	TENT	Support Brigade	MI Bn						
263	18.375	23.041	5	TENT	Support Brigade		SPT Div and Mech Inf Div HQ					
264	17.946	23.354	5	TENT	Support Brigade			Signal Platoon				
265	18.322	23.234	5	TENT	Support Brigade		SPT Div and Mech Inf Div HQ					
266	17.871	23.446	5	TENT	Support Brigade			Signal Platoon				
267	18.457	23.056	5	TENT	Support Brigade		SPT Div and Mech Inf Div HQ					
268	18.912	23.198	5	TENT	Support Brigade		CBR Co (less detachments)					
269	18.847	23.066	5	TENT	Support Brigade		CBR Co (less detachments)					
270	18.931	23.07	5	TENT	Support Brigade		CBR Co (less detachments)					
271	18.815	23.167	5	TENT	Support Brigade		CBR Co (less detachments)					
272	17.654	24.088	5	TENT	Support Brigade	MI Bn						
273	18.388	23.221	5	TENT	Support Brigade		SPT Div and Mech Inf Div HQ					
274	17.554	23.728	5	TENT	Support Brigade	MI Bn						
275	17.659	23.893	5	TENT	Support Brigade	MI Bn						
276	17.445	23.969	5	TENT	Support Brigade	MI Bn						
277	17.554	23.921	5	TENT	Support Brigade	MI Bn						
278	17.752	24.26	5	FOXH	Support Brigade	MI Bn						
279	18.479	23.337	5	FOXH	Support Brigade		SPT Div and Mech Inf Div HQ					
280	17.642	24.022	5	FOXH	Support Brigade	MI Bn						
281	17.58	24.093	5	FOXH	Support Brigade	MI Bn						
282	18.448	23.188	5	FOXH	Support Brigade		SPT Div and Mech Inf Div HQ					
283	17.536	23.658	5	FOXH	Support Brigade	MI Bn						
284	17.455	23.844	5	FOXH	Support Brigade	MI Bn						
285	18.364	23.146	5	FOXH	Support Brigade		SPT Div and Mech Inf Div HQ					
286	17.668	23.823	5	FOXH	Support Brigade	MI Bn						
287	17.953	23.437	5	FOXH	Support Brigade			Signal Platoon				
288	17.572	23.825	5	FOXH	Support Brigade	MI Bn						
289	17.538	23.994	5	FOXH	Support Brigade	MI Bn						
290	16.804	22.744	1	DISM	Support Brigade		Train Company CSB					
298	16.041	25.034	5	DISM	Support Brigade		DS CSB Repair & Maint Co					
299	16.908	25.062	5	DISM	Support Brigade		DS CSB Repair & Maint Co					
300	16.519	25.093	5	DISM	Support Brigade		DS CSB Repair & Maint Co					
301	16.054	25.942	5	DISM	Support Brigade		DS CSB Repair & Maint Co					
302	16.207	22.205	5	DISM	Support Brigade		Train Company CSB					
303	16.037	22.966	5	DISM	Support Brigade		Train Company CSB					
304	16.564	22.273	5	DISM	Support Brigade		Train Company CSB					
305	16.527	22.495	5	DISM	Support Brigade		Train Company CSB					
306	16.298	22.635	5	DISM	Support Brigade		Train Company CSB					
307	16.379	22.184	5	DISM	Support Brigade		Train Company CSB					
308	16.645	22.617	5	DISM	Support Brigade		Train Company CSB					
309	16.76	22.367	5	DISM	Support Brigade		Train Company CSB					
310	15.404	22.298	5	DISM	Support Brigade		Service Company SVC CSB					
311	15.111	22.759	5	DISM	Support Brigade		Service Company SVC CSB					
312	15.099	22.309	5	DISM	Support Brigade		Service Company SVC CSB					
313	15.351	22.586	5	DISM	Support Brigade		Service Company SVC CSB					
314	16.295	23.584	5	DISM	Support Brigade	CSB Hq Bn						
315	16.213	23.578	5	DISM	Support Brigade	CSB Hq Bn						
316	16.195	23.408	5	DISM	Support Brigade	CSB Hq Bn						
317	16.396	23.403	5	DISM	Support Brigade	CSB Hq Bn						
318	15.095	23.916	5	DISM	Support Brigade		Transport Co. CSB					
319	15.297	23.517	5	DISM	Support Brigade		Transport Co. CSB					
320	15.101	23.853	5	DISM	Support Brigade		Transport Co. CSB					
321	15.938	23.965	5	DISM	Support Brigade		Transport Co. CSB					
322	15.315	24.362	5	DISM	Support Brigade		Transport Co. CSB					
323	15.531	23.536	5	DISM	Support Brigade		Transport Co. CSB					
324	15.96	23.529	5	DISM	Support Brigade		Transport Co. CSB					
325	15.725	23.681	5	DISM	Support Brigade		Transport Co. CSB					
326	15.397	23.815	5	DISM	Support Brigade		Transport Co. CSB					
327	15.554	23.639	5	DISM	Support Brigade		Transport Co. CSB					
328	15.042	24.358	5	DISM	Support Brigade		Transport Co. CSB					
329	15.089	23.66	5	DISM	Support Brigade		Transport Co. CSB					
330	15.948	24.37	5	DISM	Support Brigade		Transport Co. CSB					
331	15.487	23.961	5	DISM	Support Brigade		Transport Co. CSB					
332	15.188	23.484	5	DISM	Support Brigade		Transport Co. CSB					
333	15.04	23.547	5	DISM	Support Brigade		Transport Co. CSB					
356	16.541	25.512	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
357	16.678	25.749	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
358	16.83	25.172	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
359	16.393	25.776	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
360	16.612	25.614	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
361	16.793	25.451	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
362	16.299	25.776	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
363	16.662	25.35	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
364	16.154	25.796	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
365	16.69	25.195	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
366	16.408	25.423	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
367	16.439	22.517	5	VAN-	Support Brigade		Train Company CSB					
368	16.261	25.626	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
369	16.461	25.593	5	VAN-	Support Brigade		DS CSB Repair & Maint Co					
374	16.417	23.547	5	TENT	Support Brigade	CSB Hq Bn						
375	16.323	23.462	5	TENT	Support Brigade	CSB Hq Bn						
376	15.643	24.224	5	TENT	Support Brigade		Transport Co. CSB					
377	15.63	24.039	5	TENT	Support Brigade		Transport Co. CSB					
378	15.383	24.323	5	TENT	Support Brigade		Transport Co. CSB					
379	15.789	24.075	5	TENT	Support Brigade		Transport Co. CSB					
380	15.542	24.25	5	TENT	Support Brigade		Transport Co. CSB					
381	16.58	25.286	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
382	16.104	25.353	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
383	16.33	25.572	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
384	16.44	25.136	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
385	16.299	25.419	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
386	16.166	25.389	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
387	16.148	25.269	5	TENT	Support Brigade		DS CSB Repair & Maint Co					
388	15.23	22.482	5	TENT	Support Brigade		Service Company SVC CSB					
389	15.549	22.469	5	TENT	Support Brigade		Service Company SVC CSB					
390	15.379	22.746	5	TENT	Support Brigade		Service Company SVC CSB					
391	15.412	22.45	5	TENT	Support Brigade		Service Company SVC CSB					
392	15.295	22.813	5	TENT	Support Brigade		Service Company SVC CSB					
393	15.532	22.696	5	TENT	Support Brigade		Service Company SVC CSB					
394	15.327	22.374	5	TENT	Support Brigade		Service Company SVC CSB					
395	15.21	22.395	5	TENT	Support Brigade		Service Company SVC CSB					
396	15.44	22.542	5	TENT	Support Brigade		Service Company SVC CSB					
397	16.906	22.69	5	TENT	Support Brigade		Train Company CSB					
398	16.833	22.662	5	TENT	Support Brigade		Train Company CSB					
399	16.059	22.445	5	TENT	Support Brigade		Train Company CSB					
400	16.153	22.847	5	TENT	Support Brigade		Train Company CSB					
401	16.293	22.563	5	TENT	Support Brigade		Train Company CSB					
402	16.343	22.889	5	TENT	Support Brigade		Train Company CSB					
403	16.054	22.672	5	TENT	Support Brigade		Train Company CSB					
404	16.286	22.732	5	TENT	Support Brigade		Train Company CSB					
405	16.114	22.56	5	TENT	Support Brigade		Train Company CSB					
406	15.553	22.564	5	TENT	Support Brigade		Service Company SVC CSB					
407	16.372	23.461	5	TENT	Support Brigade	CSB Hq Bn						
408	16.223	23.534	5	TENT	Support Brigade	CSB Hq Bn						
410	16.318	23.537	5	FOXH	Support Brigade	CSB Hq Bn						
413	15.124	24.166	5	FOXH	Support Brigade		Transport Co. CSB					
414	16.882	25.906	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
415	16.328	22.349	5	FOXH	Support Brigade		Train Company CSB					
416	16.932	22.046	5	FOXH	Support Brigade		Train Company CSB					
417	16.754	22.038	5	FOXH	Support Brigade		Train Company CSB					
418	16.483	22.377	5	FOXH	Support Brigade		Train Company CSB					
419	16.952	22.92	5	FOXH	Support Brigade		Train Company CSB					
420	15.586	22.297	5	FOXH	Support Brigade		Service Company SVC CSB					
421	15.583	22.776	5	FOXH	Support Brigade		Service Company SVC CSB					
422	16.365	23.575	5	FOXH	Support Brigade	CSB Hq Bn						
423	15.887	23.801	5	FOXH	Support Brigade		Transport Co. CSB					
424	15.635	23.695	5	FOXH	Support Brigade		Transport Co. CSB					
425	15.28	23.965	5	FOXH	Support Brigade		Transport Co. CSB					
426	15.202	23.813	5	FOXH	Support Brigade		Transport Co. CSB					
427	15.7	23.559	5	FOXH	Support Brigade		Transport Co. CSB					
428	15.562	24.362	5	FOXH	Support Brigade		Transport Co. CSB					
429	15.494	23.779	5	FOXH	Support Brigade		Transport Co. CSB					
430	15.039	23.942	5	FOXH	Support Brigade		Transport Co. CSB					
431	15.922	23.704	5	FOXH	Support Brigade		Transport Co. CSB					
445	16.268	23.434	5	FOXH	Support Brigade	CSB Hq Bn						
446	15.763	24.273	5	FOXH	Support Brigade		Transport Co. CSB					
447	15.836	24.2	5	FOXH	Support Brigade		Transport Co. CSB					
448	15.42	24.13	5	FOXH	Support Brigade		Transport Co. CSB					
449	16.354	25.04	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
450	16.268	25.222	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
451	16.218	25.131	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
452	15.441	22.716	5	FOXH	Support Brigade		Service Company SVC CSB					
453	15.179	22.564	5	FOXH	Support Brigade		Service Company SVC CSB					
454	15.508	22.325	5	FOXH	Support Brigade		Service Company SVC CSB					
455	15.079	22.573	5	FOXH	Support Brigade		Service Company SVC CSB					
456	15.232	22.676	5	FOXH	Support Brigade		Service Company SVC CSB					
457	16.286	23.014	5	FOXH	Support Brigade	CSB Hq Bn						
458	16.114	22.719	5	FOXH	Support Brigade		Train Company CSB					
459	16.557	22.774	5	FOXH	Support Brigade		Train Company CSB					

Table F2
Brigade Description by Icon Number
Support Brigade

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Vehicle	Brigade	Battalion	Company	Platoon	Section	Element	Team	Squad
460	16.473	22.855	5	FOXH	Support Brigade		Train Company CSB					
461	16.578	22.896	5	FOXH	Support Brigade		Train Company CSB					
462	16.264	23.495	5	FOXH	Support Brigade	CSB Hq Bn						
463	16.889	25.306	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
464	16.909	25.522	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
465	16.79	25.73	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
466	16.535	25.774	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
467	16.101	25.606	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
468	16.39	25.219	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
469	16.51	25.346	5	FOXH	Support Brigade		DS CSB Repair & Maint Co					
Icons outside of unit area:												
291	10.099	24.313	1	DISM								
292	10.584	23.765	1	DISM								
293	12.169	24.732	2	DISM								
294	10.749	23.252	4	DISM								
295	10.774	24.01	5	DISM								
296	12.417	22.105	5	DISM								
297	10.283	22.042	5	DISM								
334	11.73	24.808	5	DISM								
335	12.388	24.926	5	DISM								
336	11.213	22.359	5	DISM								
337	11.004	23.167	5	DISM								
338	11.864	24.773	5	DISM								
339	10.324	24.229	5	DISM								
340	12.343	23.821	5	DISM								
341	11.561	24.713	5	DISM								
342	12.402	24.713	5	DISM								
343	10.312	23.833	5	DISM								
344	10.44	23.445	5	DISM								
345	10.642	22.588	5	DISM								
346	10.572	22.167	5	DISM								
347	10.837	22.18	5	DISM								
348	11.415	24.864	5	DISM								
349	11.087	22.59	5	DISM								
350	10.277	22.652	5	DISM								
351	10.506	24.262	5	DISM								
352	10.275	22.955	5	DISM								
353	11.083	22.905	5	DISM								
354	11.664	23.658	5	DISM								
355	11.241	22.064	5	DISM								
370	11.73	23.215	5	TENT								
371	11.8	22.452	5	TENT								
372	12.048	22.765	5	TENT								
373	11.734	22.345	5	TENT								
409	12.089	22.312	5	TENT								
411	11.938	24.217	5	FOXH								
412	11.217	24.786	5	FOXH								
432	10.754	23.011	5	FOXH								
433	10.232	22.792	5	FOXH								
434	10.613	22.934	5	FOXH								
435	10.858	22.532	5	FOXH								
436	12.341	22.32	5	FOXH								
437	11.141	24.101	5	FOXH								
438	10.477	23.225	5	FOXH								
439	10.064	22.06	5	FOXH								
440	12.398	23.116	5	FOXH								
441	10.091	24.893	5	FOXH								
442	11.211	23.859	5	FOXH								
443	11.763	22.716	5	FOXH								
444	11.829	22.324	5	FOXH								

Figure F1
Brigade Layout: Standard Scale
Support Brigade

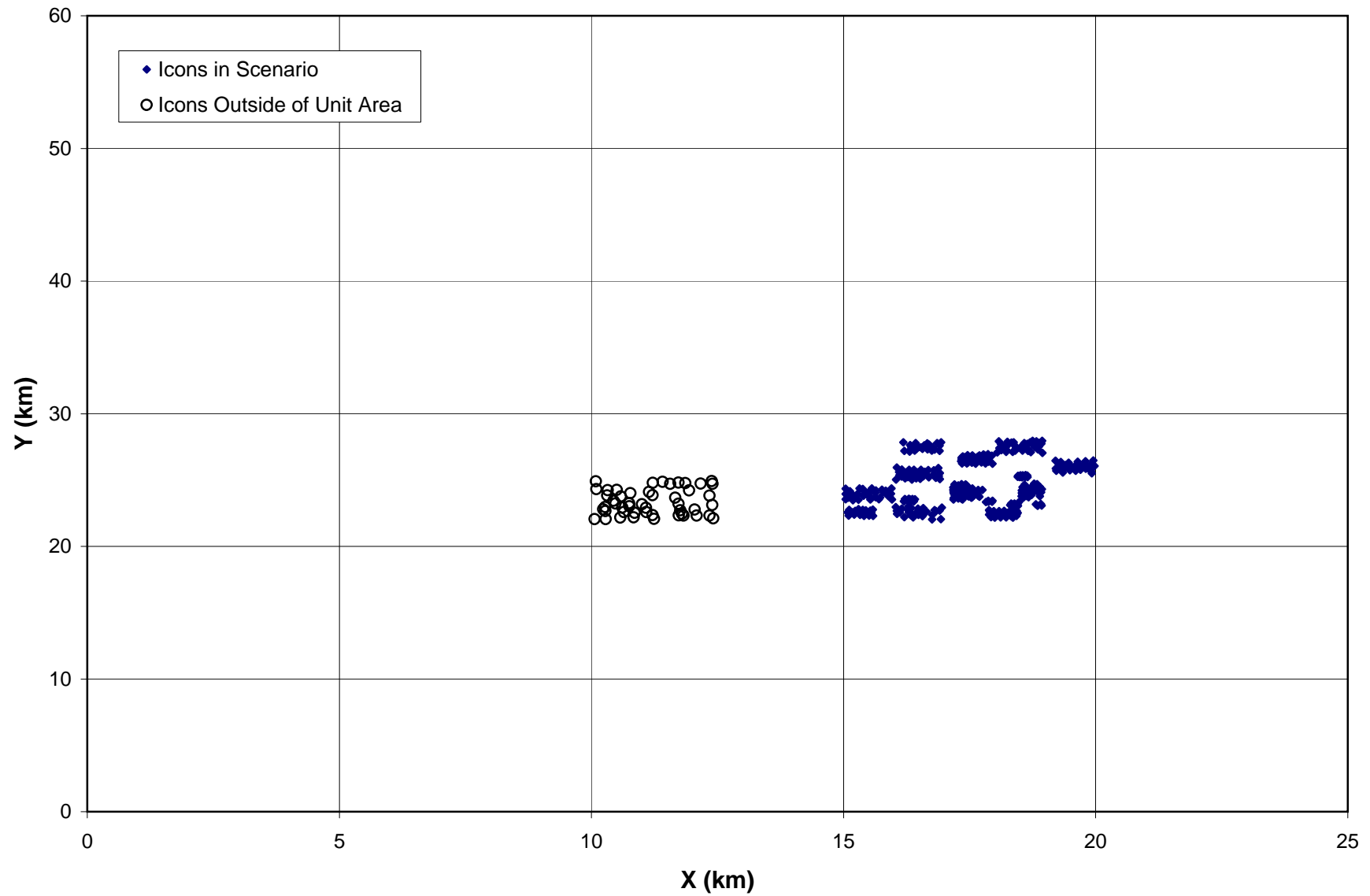


Figure F2
Brigade Layout: Small Scale
Support Brigade

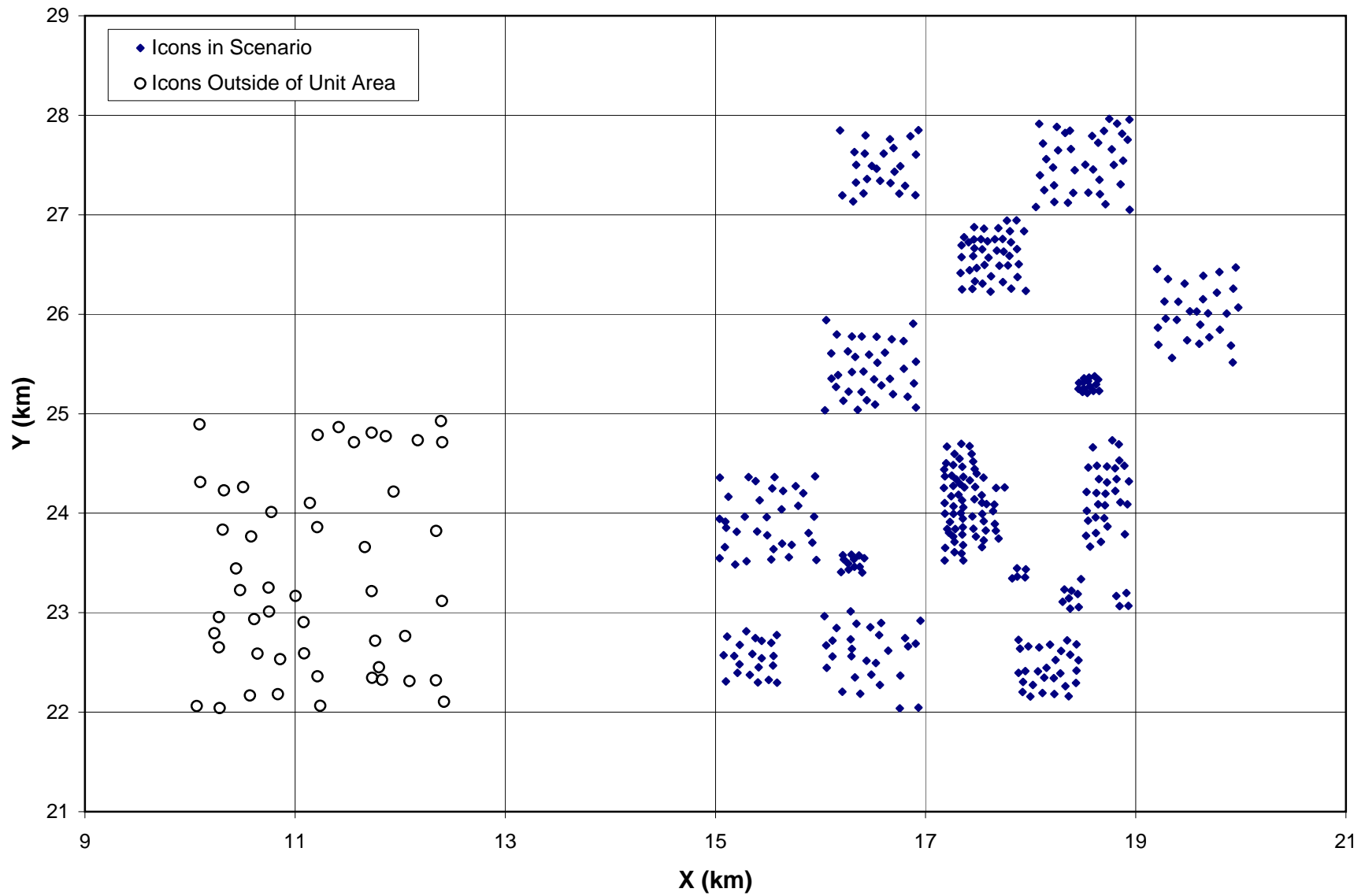


Table F3
GB Exposure Estimates
Support Brigade

Sarin (GB) 152mm Artillery
Light Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				18 rounds at aimpoint (17.40, 24.80)								
49	17.468	24.443	5	1.79E+02	0.00E+00	1.79E+02	1.79E+02	0.00E+00	7.88E-01	1.80E+02	8	
50	17.487	24.398	5	1.05E+02	0.00E+00	1.05E+02	1.05E+02	0.00E+00	4.62E-01	1.05E+02	8	
52	17.293	24.34	5	1.28E+00	0.00E+00	1.28E+00	1.28E+00	0.00E+00	5.63E-03	1.29E+00	2	
54	17.418	24.675	5	7.46E+02	0.00E+00	7.46E+02	7.46E+02	0.00E+00	3.28E+00	7.49E+02	8	
55	17.339	24.697	5	2.55E+01	0.00E+00	2.55E+01	2.55E+01	0.00E+00	1.12E-01	2.56E+01	5	
57	17.347	24.131	5	3.42E+01	0.00E+00	3.42E+01	3.42E+01	0.00E+00	1.50E-01	3.44E+01	6	
58	17.336	24.001	5	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4	
60	17.421	24.329	5	1.64E+02	0.00E+00	1.64E+02	1.64E+02	0.00E+00	7.22E-01	1.65E+02	8	
101	17.439	24.597	5	5.57E+02	0.00E+00	5.57E+02	5.57E+02	0.00E+00	2.45E+00	5.59E+02	8	
103	17.359	24.059	5	3.73E+01	0.00E+00	3.73E+01	3.73E+01	0.00E+00	1.64E-01	3.75E+01	6	
104	17.452	24.521	5	3.01E+02	0.00E+00	3.01E+02	3.01E+02	0.00E+00	1.32E+00	3.02E+02	8	
107	17.369	24.259	5	8.39E+01	0.00E+00	8.39E+01	8.39E+01	0.00E+00	3.69E-01	8.43E+01	8	
115	17.323	24.549	5	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4	
117	17.349	23.785	5	2.57E+00	0.00E+00	2.57E+00	2.57E+00	0.00E+00	1.13E-02	2.58E+00	2	
196	17.329	24.294	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5	
197	17.35	24.467	5	6.31E+01	0.00E+00	6.31E+01	6.31E+01	0.00E+00	2.78E-01	6.34E+01	7	
206	17.314	24.187	5	6.97E+00	0.00E+00	6.97E+00	6.97E+00	0.00E+00	3.07E-02	7.00E+00	4	
207	17.355	23.946	5	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5	
211	17.359	24.366	5	8.62E+01	0.00E+00	8.62E+01	8.62E+01	0.00E+00	3.79E-01	8.66E+01	8	
212	17.355	23.859	5	9.99E+00	0.00E+00	9.99E+00	9.99E+00	0.00E+00	4.40E-02	1.00E+01	4	
253	17.471	24.264	5	1.02E+02	0.00E+00	1.02E+02	1.02E+02	0.00E+00	4.49E-01	1.02E+02	8	
254	17.479	23.766	5	5.19E+00	0.00E+00	5.19E+00	5.19E+00	0.00E+00	2.28E-02	5.21E+00	3	
259	17.464	24.139	5	7.39E+01	0.00E+00	7.39E+01	7.39E+01	0.00E+00	3.25E-01	7.42E+01	7	
261	17.537	24.105	5	6.17E+00	0.00E+00	6.17E+00	6.17E+00	0.00E+00	2.71E-02	6.20E+00	4	
262	17.535	24.181	5	8.56E+00	0.00E+00	8.56E+00	8.56E+00	0.00E+00	3.77E-02	8.60E+00	4	
276	17.445	23.969	5	4.83E+01	0.00E+00	4.83E+01	4.83E+01	0.00E+00	2.13E-01	4.85E+01	6	
284	17.455	23.844	5	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5	
289	17.538	23.994	5	3.74E+00	0.00E+00	3.74E+00	3.74E+00	0.00E+00	1.65E-02	3.76E+00	3	
Case 2: Protected				18 rounds at aimpoint (16.30, 23.50)								
314	16.295	23.584	5	6.04E+00	0.00E+00	6.04E+00	9.53E+00	0.00E+00	4.19E-02	6.08E+00	4	
317	16.396	23.403	5	7.55E+00	0.00E+00	7.55E+00	1.82E+02	0.00E+00	8.01E-01	8.35E+00	4	
375	16.323	23.462	5	4.46E+01	0.00E+00	4.46E+01	1.01E+02	0.00E+00	4.44E-01	4.50E+01	6	
407	16.372	23.461	5	2.38E+02	0.00E+00	2.38E+02	3.06E+02	0.00E+00	1.35E+00	2.39E+02	8	
410	16.318	23.537	5	9.44E+00	0.00E+00	9.44E+00	2.45E+01	0.00E+00	1.08E-01	9.55E+00	4	
422	16.365	23.575	5	6.22E+00	0.00E+00	6.22E+00	8.40E+00	0.00E+00	3.70E-02	6.26E+00	4	
445	16.268	23.434	5	4.32E+01	0.00E+00	4.32E+01	3.02E+02	0.00E+00	1.33E+00	4.45E+01	6	
457	16.286	23.014	5	0.00E+00	0.00E+00	0.00E+00	15.65376	0.00E+00	6.89E-02	6.89E-02	1	
462	16.264	23.495	5	1.61E+00	0.00E+00	1.61E+00	390.0525	0.00E+00	1.72E+00	3.33E+00	3	

Sarin (GB) MRLS
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 240 rounds at aimpoint (17.50, 26.10)											
3	17.181	23.524	2	6.81E-02	0.00E+00	6.81E-02	6.81E-02	0.00E+00	3.00E-04	6.84E-02	1
48	17.187	23.651	5	7.51E-01	0.00E+00	7.51E-01	7.51E-01	0.00E+00	3.30E-03	7.54E-01	2
49	17.468	24.443	5	5.33E+01	0.00E+00	5.33E+01	5.33E+01	0.00E+00	2.35E-01	5.35E+01	7
50	17.487	24.398	5	4.94E+01	0.00E+00	4.94E+01	4.94E+01	0.00E+00	2.17E-01	4.96E+01	6
52	17.293	24.34	5	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.29E-01	2.94E+01	5
53	17.202	24.669	5	2.18E+01	0.00E+00	2.18E+01	2.18E+01	0.00E+00	9.59E-02	2.19E+01	5
54	17.418	24.675	5	6.96E+01	0.00E+00	6.96E+01	6.96E+01	0.00E+00	3.06E-01	6.99E+01	7
55	17.339	24.697	5	5.77E+01	0.00E+00	5.77E+01	5.77E+01	0.00E+00	2.54E-01	5.80E+01	7
56	17.274	24.597	5	3.68E+01	0.00E+00	3.68E+01	3.68E+01	0.00E+00	1.62E-01	3.70E+01	6

Table F3
GB Exposure Estimates
Support Brigade

57	17.347	24.131	5	2.60E+01	0.00E+00	2.60E+01	2.60E+01	0.00E+00	1.14E-01	2.61E+01	5
58	17.336	24.001	5	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5
59	17.205	23.842	5	4.07E+00	0.00E+00	4.07E+00	4.07E+00	0.00E+00	1.79E-02	4.09E+00	3
60	17.421	24.329	5	4.36E+01	0.00E+00	4.36E+01	4.36E+01	0.00E+00	1.92E-01	4.38E+01	6
72	17.445	26.254	5	4.59E+02	0.00E+00	4.59E+02	4.59E+02	0.00E+00	2.02E+00	4.61E+02	8
73	17.815	26.257	5	4.92E+01	0.00E+00	4.92E+01	4.92E+01	0.00E+00	2.16E-01	4.94E+01	6
82	17.332	26.414	5	2.11E-01	0.00E+00	2.11E-01	2.11E-01	0.00E+00	9.28E-04	2.12E-01	1
84	17.736	26.324	5	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
93	17.348	26.251	5	6.33E+02	0.00E+00	6.33E+02	6.33E+02	0.00E+00	2.79E+00	6.36E+02	8
94	17.418	26.441	5	2.02E+02	0.00E+00	2.02E+02	2.02E+02	0.00E+00	8.89E-01	2.03E+02	8
100	17.232	23.912	5	7.36E+00	0.00E+00	7.36E+00	7.36E+00	0.00E+00	3.24E-02	7.39E+00	4
101	17.439	24.597	5	6.43E+01	0.00E+00	6.43E+01	6.43E+01	0.00E+00	2.83E-01	6.46E+01	7
102	17.175	24.255	5	8.96E+00	0.00E+00	8.96E+00	8.96E+00	0.00E+00	3.94E-02	9.00E+00	4
103	17.359	24.059	5	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
104	17.452	24.521	5	5.89E+01	0.00E+00	5.89E+01	5.89E+01	0.00E+00	2.59E-01	5.92E+01	7
105	17.223	23.804	5	4.15E+00	0.00E+00	4.15E+00	4.15E+00	0.00E+00	1.83E-02	4.17E+00	3
106	17.181	24.103	5	6.90E+00	0.00E+00	6.90E+00	6.90E+00	0.00E+00	3.04E-02	6.93E+00	4
107	17.369	24.259	5	3.50E+01	0.00E+00	3.50E+01	3.50E+01	0.00E+00	1.54E-01	3.52E+01	6
108	17.177	24.439	5	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
109	17.196	24.503	5	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5
110	17.283	23.842	5	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.60E-02	8.22E+00	4
111	17.266	23.993	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
112	17.244	24.171	5	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
113	17.262	24.275	5	2.17E+01	0.00E+00	2.17E+01	2.17E+01	0.00E+00	9.55E-02	2.18E+01	5
114	17.357	23.679	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
115	17.323	24.549	5	4.53E+01	0.00E+00	4.53E+01	4.53E+01	0.00E+00	1.99E-01	4.55E+01	6
116	17.342	23.597	5	2.38E+00	0.00E+00	2.38E+00	2.38E+00	0.00E+00	1.05E-02	2.39E+00	2
117	17.349	23.785	5	8.43E+00	0.00E+00	8.43E+00	8.43E+00	0.00E+00	3.71E-02	8.47E+00	4
118	17.359	23.524	5	1.32E+00	0.00E+00	1.32E+00	1.32E+00	0.00E+00	5.81E-03	1.33E+00	2
119	17.263	24.484	5	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5
143	17.185	23.996	5	5.59E+00	0.00E+00	5.59E+00	5.59E+00	0.00E+00	2.46E-02	5.61E+00	3
193	17.263	23.765	5	4.85E+00	0.00E+00	4.85E+00	4.85E+00	0.00E+00	2.13E-02	4.87E+00	3
195	17.552	24.359	5	4.44E+01	0.00E+00	4.44E+01	4.44E+01	0.00E+00	1.95E-01	4.46E+01	6
196	17.329	24.294	5	3.24E+01	0.00E+00	3.24E+01	3.24E+01	0.00E+00	1.43E-01	3.25E+01	6
197	17.35	24.467	5	4.48E+01	0.00E+00	4.48E+01	4.48E+01	0.00E+00	1.97E-01	4.50E+01	6
199	17.47	26.332	5	5.05E+02	0.00E+00	5.05E+02	5.05E+02	0.00E+00	2.22E+00	5.07E+02	8
200	17.542	26.309	5	3.08E+02	0.00E+00	3.08E+02	3.08E+02	0.00E+00	1.36E+00	3.09E+02	8
204	17.183	24.37	5	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
206	17.314	24.187	5	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
207	17.355	23.946	5	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
208	17.275	23.609	5	1.75E+00	0.00E+00	1.75E+00	1.75E+00	0.00E+00	7.70E-03	1.76E+00	2
209	17.266	24.069	5	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
210	17.248	24.378	5	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
211	17.359	24.366	5	4.01E+01	0.00E+00	4.01E+01	4.01E+01	0.00E+00	1.76E-01	4.03E+01	6
212	17.355	23.859	5	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
213	17.275	23.713	5	3.84E+00	0.00E+00	3.84E+00	3.84E+00	0.00E+00	1.69E-02	3.86E+00	3
240	17.624	26.382	5	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
247	17.618	26.228	5	1.61E+02	0.00E+00	1.61E+02	1.61E+02	0.00E+00	7.08E-01	1.62E+02	8
253	17.471	24.264	5	4.07E+01	0.00E+00	4.07E+01	4.07E+01	0.00E+00	1.79E-01	4.09E+01	6
254	17.479	23.766	5	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
256	17.694	23.745	5	7.36E+00	0.00E+00	7.36E+00	7.36E+00	0.00E+00	3.24E-02	7.39E+00	4
259	17.464	24.139	5	3.20E+01	0.00E+00	3.20E+01	3.20E+01	0.00E+00	1.41E-01	3.21E+01	6
260	17.671	24.255	5	3.53E+01	0.00E+00	3.53E+01	3.53E+01	0.00E+00	1.55E-01	3.55E+01	6
261	17.537	24.105	5	2.85E+01	0.00E+00	2.85E+01	2.85E+01	0.00E+00	1.25E-01	2.86E+01	5
262	17.535	24.181	5	3.35E+01	0.00E+00	3.35E+01	3.35E+01	0.00E+00	1.47E-01	3.36E+01	6
272	17.654	24.088	5	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
274	17.554	23.728	5	7.88E+00	0.00E+00	7.88E+00	7.88E+00	0.00E+00	3.47E-02	7.91E+00	4
275	17.659	23.893	5	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
276	17.445	23.969	5	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
277	17.554	23.921	5	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
278	17.752	24.26	5	2.76E+01	0.00E+00	2.76E+01	2.76E+01	0.00E+00	1.21E-01	2.77E+01	5
280	17.642	24.022	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
281	17.58	24.093	5	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
283	17.536	23.658	5	5.39E+00	0.00E+00	5.39E+00	5.39E+00	0.00E+00	2.37E-02	5.41E+00	3
284	17.455	23.844	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
286	17.668	23.823	5	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
288	17.572	23.825	5	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4

Table F3
GB Exposure Estimates
Support Brigade

289	17.538	23.994	5	2.17E+01	0.00E+00	2.17E+01	2.17E+01	0.00E+00	9.55E-02	2.18E+01	5
Case 2: Protected 240 rounds at aimpoint (17.40, 24.30)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	6.12E+01	0.00E+00	2.69E-01	2.69E-01	2
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	1.07E+02	0.00E+00	4.71E-01	4.71E-01	2
49	17.468	24.443	5	1.52E+01	0.00E+00	1.52E+01	1.24E+02	0.00E+00	5.46E-01	1.57E+01	5
50	17.487	24.398	5	2.21E+01	0.00E+00	2.21E+01	2.17E+02	0.00E+00	9.55E-01	2.31E+01	5
52	17.293	24.34	5	1.14E+02	0.00E+00	1.14E+02	5.93E+02	0.00E+00	2.61E+00	1.17E+02	8
56	17.274	24.597	5	9.58E+00	0.00E+00	9.58E+00	1.38E+01	0.00E+00	6.07E-02	9.64E+00	4
57	17.347	24.131	5	4.41E+01	0.00E+00	4.41E+01	5.27E+02	0.00E+00	2.32E+00	4.64E+01	6
58	17.336	24.001	5	2.69E+01	0.00E+00	2.69E+01	3.55E+02	0.00E+00	1.56E+00	2.85E+01	5
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	1.85E+02	0.00E+00	8.14E-01	8.14E-01	2
60	17.421	24.329	5	7.11E+01	0.00E+00	7.11E+01	4.24E+02	0.00E+00	1.87E+00	7.30E+01	7
100	17.232	23.912	5	2.95E-04	0.00E+00	2.95E-04	2.66E+02	0.00E+00	1.17E+00	1.17E+00	2
101	17.439	24.597	5	8.34E+00	0.00E+00	8.34E+00	1.41E+01	0.00E+00	6.20E-02	8.40E+00	4
102	17.175	24.255	5	1.78E+01	0.00E+00	1.78E+01	4.74E+02	0.00E+00	2.09E+00	1.99E+01	5
103	17.359	24.059	5	2.58E+01	0.00E+00	2.58E+01	5.57E+02	0.00E+00	2.45E+00	2.83E+01	5
104	17.452	24.521	5	5.87E+01	0.00E+00	5.87E+01	9.64E+01	0.00E+00	4.24E-01	5.91E+01	7
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	1.61E+02	0.00E+00	7.08E-01	7.08E-01	2
106	17.181	24.103	5	4.83E+01	0.00E+00	4.83E+01	3.33E+02	0.00E+00	1.47E+00	4.98E+01	6
107	17.369	24.259	5	1.47E+01	0.00E+00	1.47E+01	2.99E+02	0.00E+00	1.32E+00	1.60E+01	5
108	17.177	24.439	5	1.20E+01	0.00E+00	1.20E+01	2.43E+02	0.00E+00	1.07E+00	1.31E+01	4
109	17.196	24.503	5	3.59E+00	0.00E+00	3.59E+00	5.53E+00	0.00E+00	2.43E-02	3.61E+00	3
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	3.84E+02	0.00E+00	1.69E+00	1.69E+00	2
111	17.266	23.993	5	3.85E+02	0.00E+00	3.85E+02	1.16E+03	0.00E+00	5.10E+00	3.90E+02	8
112	17.244	24.171	5	5.12E+02	0.00E+00	5.12E+02	1.19E+03	0.00E+00	5.24E+00	5.17E+02	8
113	17.262	24.275	5	2.56E+02	0.00E+00	2.56E+02	9.87E+02	0.00E+00	4.34E+00	2.60E+02	8
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	1.93E+02	0.00E+00	8.49E-01	8.49E-01	2
115	17.323	24.549	5	2.04E+02	0.00E+00	2.04E+02	3.92E+02	0.00E+00	1.72E+00	2.06E+02	8
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	1.36E+02	0.00E+00	5.98E-01	5.98E-01	2
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	2.44E+02	0.00E+00	1.07E+00	1.07E+00	2
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	1.10E+02	0.00E+00	4.84E-01	4.84E-01	2
119	17.263	24.484	5	2.32E+02	0.00E+00	2.32E+02	4.36E+02	0.00E+00	1.92E+00	2.34E+02	8
143	17.185	23.996	5	1.93E+01	0.00E+00	1.93E+01	5.95E+02	0.00E+00	2.62E+00	2.19E+01	5
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	2.19E+02	0.00E+00	9.64E-01	9.64E-01	2
195	17.552	24.359	5	1.46E+02	0.00E+00	1.46E+02	3.54E+02	0.00E+00	1.56E+00	1.48E+02	8
196	17.329	24.294	5	1.34E+02	0.00E+00	1.34E+02	5.75E+02	0.00E+00	2.53E+00	1.37E+02	8
197	17.35	24.467	5	8.38E+00	0.00E+00	8.38E+00	4.69E+02	0.00E+00	2.06E+00	1.04E+01	4
204	17.183	24.37	5	1.74E+01	0.00E+00	1.74E+01	3.86E+02	0.00E+00	1.70E+00	1.91E+01	5
206	17.314	24.187	5	6.11E+01	0.00E+00	6.11E+01	5.54E+02	0.00E+00	2.44E+00	6.35E+01	7
207	17.355	23.946	5	1.70E+01	0.00E+00	1.70E+01	4.70E+02	0.00E+00	2.07E+00	1.91E+01	5
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	1.25E+02	0.00E+00	5.50E-01	5.50E-01	2
209	17.266	24.069	5	2.15E+02	0.00E+00	2.15E+02	8.16E+02	0.00E+00	3.59E+00	2.19E+02	8
210	17.248	24.378	5	9.80E+01	0.00E+00	9.80E+01	6.86E+02	0.00E+00	3.02E+00	1.01E+02	8
211	17.359	24.366	5	8.53E+00	0.00E+00	8.53E+00	2.95E+02	0.00E+00	1.30E+00	9.83E+00	4
212	17.355	23.859	5	3.07E-02	0.00E+00	3.07E-02	3.73E+02	0.00E+00	1.64E+00	1.67E+00	2
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	1.93E+02	0.00E+00	8.49E-01	8.49E-01	2
253	17.471	24.264	5	4.45E+01	0.00E+00	4.45E+01	3.19E+02	0.00E+00	1.40E+00	4.59E+01	6
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	1.80E+02	0.00E+00	7.92E-01	7.92E-01	2
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	1.13E+02	0.00E+00	4.97E-01	4.97E-01	2
259	17.464	24.139	5	1.06E+02	0.00E+00	1.06E+02	5.34E+02	0.00E+00	2.35E+00	1.08E+02	8
260	17.671	24.255	5	2.98E+02	0.00E+00	2.98E+02	5.49E+02	0.00E+00	2.42E+00	3.00E+02	8
261	17.537	24.105	5	2.07E+02	0.00E+00	2.07E+02	5.78E+02	0.00E+00	2.54E+00	2.10E+02	8
262	17.535	24.181	5	1.63E+02	0.00E+00	1.63E+02	5.08E+02	0.00E+00	2.24E+00	1.65E+02	8
272	17.654	24.088	5	5.33E+01	0.00E+00	5.33E+01	4.60E+02	0.00E+00	2.02E+00	5.53E+01	7
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	2.19E+02	0.00E+00	9.64E-01	9.64E-01	2
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	2.43E+02	0.00E+00	1.07E+00	1.07E+00	2
276	17.445	23.969	5	5.65E+01	0.00E+00	5.65E+01	5.45E+02	0.00E+00	2.40E+00	5.89E+01	7
277	17.554	23.921	5	2.17E+01	0.00E+00	2.17E+01	4.34E+02	0.00E+00	1.91E+00	2.36E+01	5
280	17.642	24.022	5	1.77E+01	0.00E+00	1.77E+01	4.34E+02	0.00E+00	1.91E+00	1.96E+01	5
281	17.58	24.093	5	2.82E+02	0.00E+00	2.82E+02	9.26E+02	0.00E+00	4.07E+00	2.86E+02	8
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	1.51E+02	0.00E+00	6.64E-01	6.64E-01	2
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	2.52E+02	0.00E+00	1.11E+00	1.11E+00	2
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	1.96E+02	0.00E+00	8.62E-01	8.62E-01	2
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	3.11E+02	0.00E+00	1.37E+00	1.37E+00	2
289	17.538	23.994	5	8.20E+01	0.00E+00	8.20E+01	4.80E+02	0.00E+00	2.11E+00	8.41E+01	8

Table F3
GB Exposure Estimates
Support Brigade

Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 720 rounds at aimpoint (18.00, 25.60)											
1	18.436	22.418	1	5.18E+00	0.00E+00	5.18E+00	5.18E+00	0.00E+00	2.28E-02	5.20E+00	3
4	18.493	25.22	3	2.57E+02	0.00E+00	2.57E+02	2.57E+02	0.00E+00	1.13E+00	2.58E+02	8
35	18.597	25.229	5	8.17E+00	0.00E+00	8.17E+00	8.17E+00	0.00E+00	3.59E-02	8.21E+00	4
37	18.503	25.254	5	2.34E+02	0.00E+00	2.34E+02	2.34E+02	0.00E+00	1.03E+00	2.35E+02	8
39	18.591	24.662	5	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
47	17.923	22.204	5	4.46E+00	0.00E+00	4.46E+00	4.46E+00	0.00E+00	1.96E-02	4.48E+00	3
49	17.468	24.443	5	3.32E+01	0.00E+00	3.32E+01	3.32E+01	0.00E+00	1.46E-01	3.33E+01	6
50	17.487	24.398	5	3.81E+01	0.00E+00	3.81E+01	3.81E+01	0.00E+00	1.68E-01	3.83E+01	6
51	18.556	25.363	5	1.54E+02	0.00E+00	1.54E+02	1.54E+02	0.00E+00	6.78E-01	1.55E+02	8
52	17.293	24.34	5	7.99E-01	0.00E+00	7.99E-01	7.99E-01	0.00E+00	3.52E-03	8.03E-01	2
54	17.418	24.675	5	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
55	17.339	24.697	5	1.76E+00	0.00E+00	1.76E+00	1.76E+00	0.00E+00	7.74E-03	1.77E+00	2
56	17.274	24.597	5	1.26E-01	0.00E+00	1.26E-01	1.26E-01	0.00E+00	5.54E-04	1.27E-01	1
57	17.347	24.131	5	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.01E-02	4.58E+00	3
58	17.336	24.001	5	4.04E+00	0.00E+00	4.04E+00	4.04E+00	0.00E+00	1.78E-02	4.06E+00	3
59	17.205	23.842	5	2.28E-02	0.00E+00	2.28E-02	2.28E-02	0.00E+00	1.00E-04	2.29E-02	1
60	17.421	24.329	5	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
64	18.63	24.478	5	6.64E+00	0.00E+00	6.64E+00	6.64E+00	0.00E+00	2.92E-02	6.67E+00	4
66	18.725	24.47	5	3.24E-01	0.00E+00	3.24E-01	3.24E-01	0.00E+00	1.43E-03	3.25E-01	2
67	18.548	24.46	5	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
70	18.282	22.39	5	6.59E+00	0.00E+00	6.59E+00	6.59E+00	0.00E+00	2.90E-02	6.62E+00	4
79	18.238	22.525	5	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
80	18.435	22.682	5	9.98E+00	0.00E+00	9.98E+00	9.98E+00	0.00E+00	4.39E-02	1.00E+01	4
83	18.456	22.521	5	6.40E+00	0.00E+00	6.40E+00	6.40E+00	0.00E+00	2.82E-02	6.43E+00	4
85	17.884	22.396	5	7.90E+00	0.00E+00	7.90E+00	7.90E+00	0.00E+00	3.48E-02	7.93E+00	4
87	17.977	22.662	5	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
89	18.29	22.615	5	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
90	18.43	22.295	5	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.57E-02	3.58E+00	3
91	17.898	22.639	5	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
92	18.185	22.679	5	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
96	18.54	25.208	5	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
97	18.546	25.327	5	1.62E+02	0.00E+00	1.62E+02	1.62E+02	0.00E+00	7.13E-01	1.63E+02	8
100	17.232	23.912	5	1.34E-01	0.00E+00	1.34E-01	1.34E-01	0.00E+00	5.90E-04	1.35E-01	1
101	17.439	24.597	5	2.56E+01	0.00E+00	2.56E+01	2.56E+01	0.00E+00	1.13E-01	2.57E+01	5
103	17.359	24.059	5	6.03E+00	0.00E+00	6.03E+00	6.03E+00	0.00E+00	2.65E-02	6.06E+00	4
104	17.452	24.521	5	2.89E+01	0.00E+00	2.89E+01	2.89E+01	0.00E+00	1.27E-01	2.90E+01	5
105	17.223	23.804	5	1.10E-01	0.00E+00	1.10E-01	1.10E-01	0.00E+00	4.84E-04	1.10E-01	1
107	17.369	24.259	5	7.11E+00	0.00E+00	7.11E+00	7.11E+00	0.00E+00	3.13E-02	7.14E+00	4
110	17.283	23.842	5	1.11E+00	0.00E+00	1.11E+00	1.11E+00	0.00E+00	4.88E-03	1.11E+00	2
111	17.266	23.993	5	6.14E-01	0.00E+00	6.14E-01	6.14E-01	0.00E+00	2.70E-03	6.17E-01	2
112	17.244	24.171	5	7.05E-02	0.00E+00	7.05E-02	7.05E-02	0.00E+00	3.10E-04	7.08E-02	1
113	17.262	24.275	5	2.87E-01	0.00E+00	2.87E-01	2.87E-01	0.00E+00	1.26E-03	2.88E-01	2
114	17.357	23.679	5	5.18E+00	0.00E+00	5.18E+00	5.18E+00	0.00E+00	2.28E-02	5.20E+00	3
115	17.323	24.549	5	1.64E+00	0.00E+00	1.64E+00	1.64E+00	0.00E+00	7.22E-03	1.65E+00	2
116	17.342	23.597	5	3.91E+00	0.00E+00	3.91E+00	3.91E+00	0.00E+00	1.72E-02	3.93E+00	3
117	17.349	23.785	5	4.72E+00	0.00E+00	4.72E+00	4.72E+00	0.00E+00	2.08E-02	4.74E+00	3
118	17.359	23.524	5	4.84E+00	0.00E+00	4.84E+00	4.84E+00	0.00E+00	2.13E-02	4.86E+00	3
119	17.263	24.484	5	1.47E-01	0.00E+00	1.47E-01	1.47E-01	0.00E+00	6.47E-04	1.48E-01	1
120	18.546	23.924	5	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.49E-02	1.94E+01	5
121	18.621	23.802	5	7.46E+00	0.00E+00	7.46E+00	7.46E+00	0.00E+00	3.28E-02	7.49E+00	4
122	18.534	24.025	5	2.33E+01	0.00E+00	2.33E+01	2.33E+01	0.00E+00	1.03E-01	2.34E+01	5
123	18.669	23.711	5	3.41E+00	0.00E+00	3.41E+00	3.41E+00	0.00E+00	1.50E-02	3.43E+00	3
124	18.708	24.08	5	1.29E+00	0.00E+00	1.29E+00	1.29E+00	0.00E+00	5.68E-03	1.30E+00	2
125	18.731	23.867	5	7.85E-01	0.00E+00	7.85E-01	7.85E-01	0.00E+00	3.45E-03	7.88E-01	2
126	17.927	22.304	5	6.37E+00	0.00E+00	6.37E+00	6.37E+00	0.00E+00	2.80E-02	6.40E+00	4

Table F3
GB Exposure Estimates
Support Brigade

127	18.068	22.411	5	8.99E+00	0.00E+00	8.99E+00	8.99E+00	0.00E+00	3.96E-02	9.03E+00	4
128	18.221	22.341	5	6.02E+00	0.00E+00	6.02E+00	6.02E+00	0.00E+00	2.65E-02	6.05E+00	4
129	17.95	22.413	5	8.62E+00	0.00E+00	8.62E+00	8.62E+00	0.00E+00	3.79E-02	8.66E+00	4
130	18.113	22.192	5	4.35E+00	0.00E+00	4.35E+00	4.35E+00	0.00E+00	1.91E-02	4.37E+00	3
131	18.022	22.275	5	6.26E+00	0.00E+00	6.26E+00	6.26E+00	0.00E+00	2.75E-02	6.29E+00	4
132	18.15	22.445	5	9.15E+00	0.00E+00	9.15E+00	9.15E+00	0.00E+00	4.03E-02	9.19E+00	4
133	18.565	23.665	5	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
151	18.507	25.357	5	2.62E+02	0.00E+00	2.62E+02	2.62E+02	0.00E+00	1.15E+00	2.63E+02	8
153	18.624	25.296	5	9.13E-01	0.00E+00	9.13E-01	9.13E-01	0.00E+00	4.02E-03	9.17E-01	2
186	18.456	25.249	5	4.06E+02	0.00E+00	4.06E+02	4.06E+02	0.00E+00	1.79E+00	4.08E+02	8
187	17.885	22.726	5	1.71E+01	0.00E+00	1.71E+01	1.71E+01	0.00E+00	7.52E-02	1.72E+01	5
189	18.711	24.196	5	1.05E+00	0.00E+00	1.05E+00	1.05E+00	0.00E+00	4.62E-03	1.05E+00	2
190	18.65	24.342	5	4.12E+00	0.00E+00	4.12E+00	4.12E+00	0.00E+00	1.81E-02	4.14E+00	3
191	18.361	22.159	5	2.60E+00	0.00E+00	2.60E+00	2.60E+00	0.00E+00	1.14E-02	2.61E+00	2
192	18.459	25.309	5	4.09E+02	0.00E+00	4.09E+02	4.09E+02	0.00E+00	1.80E+00	4.11E+02	8
193	17.263	23.765	5	5.87E-01	0.00E+00	5.87E-01	5.87E-01	0.00E+00	2.58E-03	5.90E-01	2
195	17.552	24.359	5	5.68E+01	0.00E+00	5.68E+01	5.68E+01	0.00E+00	2.50E-01	5.70E+01	7
196	17.329	24.294	5	2.89E+00	0.00E+00	2.89E+00	2.89E+00	0.00E+00	1.27E-02	2.90E+00	2
197	17.35	24.467	5	3.48E+00	0.00E+00	3.48E+00	3.48E+00	0.00E+00	1.53E-02	3.50E+00	3
198	18.347	22.723	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
201	18.562	25.274	5	9.11E+01	0.00E+00	9.11E+01	9.11E+01	0.00E+00	4.01E-01	9.15E+01	8
202	18.502	25.317	5	2.59E+02	0.00E+00	2.59E+02	2.59E+02	0.00E+00	1.14E+00	2.60E+02	8
205	18.626	24.203	5	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.41E-02	7.77E+00	4
206	17.314	24.187	5	2.21E+00	0.00E+00	2.21E+00	2.21E+00	0.00E+00	9.72E-03	2.22E+00	2
207	17.355	23.946	5	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.44E-02	5.56E+00	3
208	17.275	23.609	5	8.75E-01	0.00E+00	8.75E-01	8.75E-01	0.00E+00	3.85E-03	8.79E-01	2
209	17.266	24.069	5	5.53E-01	0.00E+00	5.53E-01	5.53E-01	0.00E+00	2.43E-03	5.55E-01	2
210	17.248	24.378	5	6.58E-03	0.00E+00	6.58E-03	6.58E-03	0.00E+00	2.90E-05	6.61E-03	1
211	17.359	24.366	5	5.32E+00	0.00E+00	5.32E+00	5.32E+00	0.00E+00	2.34E-02	5.34E+00	3
212	17.355	23.859	5	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
213	17.275	23.713	5	8.94E-01	0.00E+00	8.94E-01	8.94E-01	0.00E+00	3.93E-03	8.98E-01	2
214	18.619	23.957	5	8.20E+00	0.00E+00	8.20E+00	8.20E+00	0.00E+00	3.61E-02	8.24E+00	4
215	18.642	24.09	5	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.52E-02	5.75E+00	3
216	18.7	23.951	5	1.65E+00	0.00E+00	1.65E+00	1.65E+00	0.00E+00	7.26E-03	1.66E+00	2
217	17.997	22.157	5	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3
218	18.129	22.348	5	7.21E+00	0.00E+00	7.21E+00	7.21E+00	0.00E+00	3.17E-02	7.24E+00	4
219	18.331	22.261	5	4.18E+00	0.00E+00	4.18E+00	4.18E+00	0.00E+00	1.84E-02	4.20E+00	3
220	18.528	23.774	5	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
229	18.608	25.375	5	3.66E-01	0.00E+00	3.66E-01	3.66E-01	0.00E+00	1.61E-03	3.68E-01	2
230	18.643	25.342	5	1.38E-01	0.00E+00	1.38E-01	1.38E-01	0.00E+00	6.07E-04	1.39E-01	1
238	18.533	24.214	5	2.67E+01	0.00E+00	2.67E+01	2.67E+01	0.00E+00	1.17E-01	2.68E+01	5
239	18.727	24.309	5	5.03E-01	0.00E+00	5.03E-01	5.03E-01	0.00E+00	2.21E-03	5.05E-01	2
243	18.226	22.183	5	3.31E+00	0.00E+00	3.31E+00	3.31E+00	0.00E+00	1.46E-02	3.32E+00	3
250	18.375	22.578	5	9.70E+00	0.00E+00	9.70E+00	9.70E+00	0.00E+00	4.27E-02	9.74E+00	4
252	18.082	22.652	5	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5
253	17.471	24.264	5	2.92E+01	0.00E+00	2.92E+01	2.92E+01	0.00E+00	1.28E-01	2.93E+01	5
254	17.479	23.766	5	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
255	18.303	23.109	5	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
256	17.694	23.745	5	4.99E+01	0.00E+00	4.99E+01	4.99E+01	0.00E+00	2.20E-01	5.01E+01	7
257	17.825	23.345	5	3.85E+01	0.00E+00	3.85E+01	3.85E+01	0.00E+00	1.69E-01	3.87E+01	6
258	17.872	23.363	5	4.06E+01	0.00E+00	4.06E+01	4.06E+01	0.00E+00	1.79E-01	4.08E+01	6
259	17.464	24.139	5	2.47E+01	0.00E+00	2.47E+01	2.47E+01	0.00E+00	1.09E-01	2.48E+01	5
260	17.671	24.255	5	7.55E+01	0.00E+00	7.55E+01	7.55E+01	0.00E+00	3.32E-01	7.58E+01	8
261	17.537	24.105	5	4.08E+01	0.00E+00	4.08E+01	4.08E+01	0.00E+00	1.80E-01	4.10E+01	6
262	17.535	24.181	5	4.31E+01	0.00E+00	4.31E+01	4.31E+01	0.00E+00	1.90E-01	4.33E+01	6
263	18.375	23.041	5	2.09E+01	0.00E+00	2.09E+01	2.09E+01	0.00E+00	9.20E-02	2.10E+01	5
264	17.946	23.354	5	4.14E+01	0.00E+00	4.14E+01	4.14E+01	0.00E+00	1.82E-01	4.16E+01	6
265	18.322	23.234	5	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
266	17.871	23.446	5	4.42E+01	0.00E+00	4.42E+01	4.42E+01	0.00E+00	1.94E-01	4.44E+01	6
267	18.457	23.056	5	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.91E-02	1.58E+01	5
272	17.654	24.088	5	6.20E+01	0.00E+00	6.20E+01	6.20E+01	0.00E+00	2.73E-01	6.23E+01	7
273	18.388	23.221	5	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
274	17.554	23.728	5	3.16E+01	0.00E+00	3.16E+01	3.16E+01	0.00E+00	1.39E-01	3.17E+01	6
275	17.659	23.893	5	5.29E+01	0.00E+00	5.29E+01	5.29E+01	0.00E+00	2.33E-01	5.31E+01	7
276	17.445	23.969	5	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
277	17.554	23.921	5	3.76E+01	0.00E+00	3.76E+01	3.76E+01	0.00E+00	1.65E-01	3.78E+01	6
278	17.752	24.26	5	8.90E+01	0.00E+00	8.90E+01	8.90E+01	0.00E+00	3.92E-01	8.94E+01	8

Table F3
GB Exposure Estimates
Support Brigade

279	18.479	23.337	5	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.40E-02	1.92E+01	5
280	17.642	24.022	5	5.64E+01	0.00E+00	5.64E+01	5.64E+01	0.00E+00	2.48E-01	5.66E+01	7
281	17.58	24.093	5	4.92E+01	0.00E+00	4.92E+01	4.92E+01	0.00E+00	2.16E-01	4.94E+01	6
282	18.448	23.188	5	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
283	17.536	23.658	5	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
284	17.455	23.844	5	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
285	18.364	23.146	5	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
286	17.668	23.823	5	5.07E+01	0.00E+00	5.07E+01	5.07E+01	0.00E+00	2.23E-01	5.09E+01	7
287	17.953	23.437	5	4.52E+01	0.00E+00	4.52E+01	4.52E+01	0.00E+00	1.99E-01	4.54E+01	6
288	17.572	23.825	5	3.74E+01	0.00E+00	3.74E+01	3.74E+01	0.00E+00	1.65E-01	3.76E+01	6
289	17.538	23.994	5	3.69E+01	0.00E+00	3.69E+01	3.69E+01	0.00E+00	1.62E-01	3.71E+01	6
Case 2: Protected 720 rounds at aimpoint (17.30, 24.60)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	8.91E+01	0.00E+00	3.92E-01	3.92E-01	2
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	1.24E+02	0.00E+00	5.46E-01	5.46E-01	2
49	17.468	24.443	5	1.11E+02	0.00E+00	1.11E+02	4.16E+02	0.00E+00	1.83E+00	1.13E+02	8
50	17.487	24.398	5	1.23E+02	0.00E+00	1.23E+02	4.49E+02	0.00E+00	1.98E+00	1.25E+02	8
52	17.293	24.34	5	1.75E+02	0.00E+00	1.75E+02	5.30E+02	0.00E+00	2.33E+00	1.77E+02	8
53	17.202	24.669	5	2.16E+01	0.00E+00	2.16E+01	3.97E+02	0.00E+00	1.75E+00	2.33E+01	5
54	17.418	24.675	5	7.58E+01	0.00E+00	7.58E+01	3.32E+02	0.00E+00	1.46E+00	7.73E+01	8
55	17.339	24.697	5	1.50E+02	0.00E+00	1.50E+02	5.14E+02	0.00E+00	2.26E+00	1.52E+02	8
56	17.274	24.597	5	1.32E+01	0.00E+00	1.32E+01	2.48E+02	0.00E+00	1.09E+00	1.43E+01	4
57	17.347	24.131	5	1.14E+02	0.00E+00	1.14E+02	5.95E+02	0.00E+00	2.62E+00	1.17E+02	8
58	17.336	24.001	5	2.75E+01	0.00E+00	2.75E+01	3.14E+02	0.00E+00	1.38E+00	2.89E+01	5
59	17.205	23.842	5	4.70E+00	0.00E+00	4.70E+00	2.55E+02	0.00E+00	1.12E+00	5.82E+00	3
60	17.421	24.329	5	1.13E+02	0.00E+00	1.13E+02	4.98E+02	0.00E+00	2.19E+00	1.15E+02	8
91	17.898	22.639	5	0.00E+00	0.00E+00	0.00E+00	6.16E-03	0.00E+00	2.71E-05	2.71E-05	1
100	17.232	23.912	5	1.92E+01	0.00E+00	1.92E+01	3.76E+02	0.00E+00	1.65E+00	2.09E+01	5
101	17.439	24.597	5	2.69E+01	0.00E+00	2.69E+01	3.84E+02	0.00E+00	1.69E+00	2.86E+01	5
102	17.175	24.255	5	1.21E+02	0.00E+00	1.21E+02	4.81E+02	0.00E+00	2.12E+00	1.23E+02	8
103	17.359	24.059	5	6.53E+01	0.00E+00	6.53E+01	4.51E+02	0.00E+00	1.98E+00	6.73E+01	7
104	17.452	24.521	5	7.33E+01	0.00E+00	7.33E+01	4.20E+02	0.00E+00	1.85E+00	7.51E+01	8
105	17.223	23.804	5	6.06E-01	0.00E+00	6.06E-01	2.03E+02	0.00E+00	8.93E-01	1.50E+00	2
106	17.181	24.103	5	7.32E+01	0.00E+00	7.32E+01	4.79E+02	0.00E+00	2.11E+00	7.53E+01	8
107	17.369	24.259	5	1.36E+02	0.00E+00	1.36E+02	6.28E+02	0.00E+00	2.76E+00	1.39E+02	8
108	17.177	24.439	5	2.50E+02	0.00E+00	2.50E+02	5.49E+02	0.00E+00	2.42E+00	2.52E+02	8
109	17.196	24.503	5	1.27E+02	0.00E+00	1.27E+02	4.66E+02	0.00E+00	2.05E+00	1.29E+02	8
110	17.283	23.842	5	3.01E+00	0.00E+00	3.01E+00	2.31E+02	0.00E+00	1.02E+00	4.03E+00	3
111	17.266	23.993	5	2.76E+01	0.00E+00	2.76E+01	4.34E+02	0.00E+00	1.91E+00	2.95E+01	5
112	17.244	24.171	5	8.58E+01	0.00E+00	8.58E+01	5.39E+02	0.00E+00	2.37E+00	8.82E+01	8
113	17.262	24.275	5	8.70E+01	0.00E+00	8.70E+01	4.52E+02	0.00E+00	1.99E+00	8.90E+01	8
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	1.59E+02	0.00E+00	7.00E-01	7.00E-01	2
115	17.323	24.549	5	6.26E+01	0.00E+00	6.26E+01	3.19E+02	0.00E+00	1.40E+00	6.40E+01	7
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	1.29E+02	0.00E+00	5.68E-01	5.68E-01	2
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	2.00E+02	0.00E+00	8.80E-01	8.80E-01	2
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	1.10E+02	0.00E+00	4.84E-01	4.84E-01	2
119	17.263	24.484	5	3.56E+01	0.00E+00	3.56E+01	2.60E+02	0.00E+00	1.14E+00	3.67E+01	6
143	17.185	23.996	5	7.12E+01	0.00E+00	7.12E+01	5.28E+02	0.00E+00	2.32E+00	7.35E+01	7
187	17.885	22.726	5	0.00E+00	0.00E+00	0.00E+00	3.42E-02	0.00E+00	1.50E-04	1.50E-04	1
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	1.90E+02	0.00E+00	8.36E-01	8.36E-01	2
195	17.552	24.359	5	1.06E+02	0.00E+00	1.06E+02	4.61E+02	0.00E+00	2.03E+00	1.08E+02	8
196	17.329	24.294	5	1.77E+02	0.00E+00	1.77E+02	5.87E+02	0.00E+00	2.58E+00	1.80E+02	8
197	17.35	24.467	5	1.28E+02	0.00E+00	1.28E+02	3.91E+02	0.00E+00	1.72E+00	1.30E+02	8
204	17.183	24.37	5	2.49E+02	0.00E+00	2.49E+02	5.51E+02	0.00E+00	2.42E+00	2.51E+02	8
206	17.314	24.187	5	1.45E+02	0.00E+00	1.45E+02	6.37E+02	0.00E+00	2.80E+00	1.48E+02	8
207	17.355	23.946	5	2.45E+01	0.00E+00	2.45E+01	2.94E+02	0.00E+00	1.29E+00	2.58E+01	5
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	1.28E+02	0.00E+00	5.63E-01	5.63E-01	2
209	17.266	24.069	5	5.76E+01	0.00E+00	5.76E+01	4.91E+02	0.00E+00	2.16E+00	5.98E+01	7
210	17.248	24.378	5	1.82E+01	0.00E+00	1.82E+01	1.98E+02	0.00E+00	8.71E-01	1.91E+01	5
211	17.359	24.366	5	1.58E+02	0.00E+00	1.58E+02	4.61E+02	0.00E+00	2.03E+00	1.60E+02	8
212	17.355	23.859	5	9.91E+00	0.00E+00	9.91E+00	2.42E+02	0.00E+00	1.06E+00	1.10E+01	4
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	1.66E+02	0.00E+00	7.30E-01	7.30E-01	2
253	17.471	24.264	5	1.59E+02	0.00E+00	1.59E+02	4.57E+02	0.00E+00	2.01E+00	1.61E+02	8
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	1.54E+02	0.00E+00	6.78E-01	6.78E-01	2
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	1.26E+02	0.00E+00	5.54E-01	5.54E-01	2
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	1.94E+01	0.00E+00	8.54E-02	8.54E-02	1
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	1.10E+01	0.00E+00	4.84E-02	4.84E-02	1
259	17.464	24.139	5	1.48E+02	0.00E+00	1.48E+02	4.49E+02	0.00E+00	1.98E+00	1.50E+02	8

Table F3
GB Exposure Estimates
Support Brigade

260	17.671	24.255	5	1.73E+02	0.00E+00	1.73E+02	5.96E+02	0.00E+00	2.62E+00	1.76E+02	8
261	17.537	24.105	5	5.45E+00	0.00E+00	5.45E+00	2.22E+02	0.00E+00	9.77E-01	6.43E+00	4
262	17.535	24.181	5	6.60E+00	0.00E+00	6.60E+00	2.48E+02	0.00E+00	1.09E+00	7.69E+00	4
264	17.946	23.354	5	0.00E+00	0.00E+00	0.00E+00	2.33E+00	0.00E+00	1.03E-02	1.03E-02	1
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	1.39E+01	0.00E+00	6.12E-02	6.12E-02	1
272	17.654	24.088	5	6.83E+01	0.00E+00	6.83E+01	3.85E+02	0.00E+00	1.69E+00	7.00E+01	7
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	1.23E+02	0.00E+00	5.41E-01	5.41E-01	2
275	17.659	23.893	5	1.62E-03	0.00E+00	1.62E-03	2.18E+02	0.00E+00	9.59E-01	9.61E-01	2
276	17.445	23.969	5	1.34E-02	0.00E+00	1.34E-02	3.28E+02	0.00E+00	1.44E+00	1.46E+00	2
277	17.554	23.921	5	8.74E-03	0.00E+00	8.74E-03	1.65E+02	0.00E+00	7.26E-01	7.35E-01	2
278	17.752	24.26	5	9.87E+01	0.00E+00	9.87E+01	4.01E+02	0.00E+00	1.76E+00	1.00E+02	8
280	17.642	24.022	5	2.13E+01	0.00E+00	2.13E+01	3.39E+02	0.00E+00	1.49E+00	2.28E+01	5
281	17.58	24.093	5	1.04E+02	0.00E+00	1.04E+02	3.73E+02	0.00E+00	1.64E+00	1.06E+02	8
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	1.11E+02	0.00E+00	4.88E-01	4.88E-01	2
284	17.455	23.844	5	2.95E-01	0.00E+00	2.95E-01	2.07E+02	0.00E+00	9.11E-01	1.21E+00	2
286	17.668	23.823	5	3.12E-04	0.00E+00	3.12E-04	1.63E+02	0.00E+00	7.17E-01	7.18E-01	2
287	17.953	23.437	5	0.00E+00	0.00E+00	0.00E+00	2.24E+00	0.00E+00	9.86E-03	9.86E-03	1
288	17.572	23.825	5	1.10E-03	0.00E+00	1.10E-03	1.59E+02	0.00E+00	7.00E-01	7.01E-01	2
289	17.538	23.994	5	3.13E+00	0.00E+00	3.13E+00	1.88E+02	0.00E+00	8.27E-01	3.96E+00	3
290	16.804	22.744	1	0.00E+00	0.00E+00	0.00E+00	2.92E-01	0.00E+00	1.28E-03	1.28E-03	1
299	16.908	25.062	5	1.26E-02	0.00E+00	1.26E-02	1.28E-02	0.00E+00	5.63E-05	1.27E-02	1
397	16.906	22.69	5	0.00E+00	0.00E+00	0.00E+00	5.95E-01	0.00E+00	2.62E-03	2.62E-03	1
398	16.833	22.662	5	0.00E+00	0.00E+00	0.00E+00	1.96E-01	0.00E+00	8.62E-04	8.62E-04	1
419	16.952	22.92	5	0.00E+00	0.00E+00	0.00E+00	7.570665	0.00E+00	3.33E-02	3.33E-02	1
461	16.578	22.896	5	0.00E+00	0.00E+00	0.00E+00	0.001332	0.00E+00	5.86E-06	5.86E-06	1

Sarin (GB) 250kg Bomb
Light Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 2 rounds at aimpoint (17.40, 25.70)											
49	17.468	24.443	5	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
50	17.487	24.398	5	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
52	17.293	24.34	5	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
53	17.202	24.669	5	8.47E+00	0.00E+00	8.47E+00	8.47E+00	0.00E+00	3.73E-02	8.51E+00	4
54	17.418	24.675	5	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
55	17.339	24.697	5	4.54E+01	0.00E+00	4.54E+01	4.54E+01	0.00E+00	2.00E-01	4.56E+01	6
56	17.274	24.597	5	3.20E+01	0.00E+00	3.20E+01	3.20E+01	0.00E+00	1.41E-01	3.21E+01	6
57	17.347	24.131	5	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.54E-02	1.95E+01	5
58	17.336	24.001	5	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5
59	17.205	23.842	5	1.13E+00	0.00E+00	1.13E+00	1.13E+00	0.00E+00	4.97E-03	1.13E+00	2
60	17.421	24.329	5	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
100	17.232	23.912	5	7.70E+00	0.00E+00	7.70E+00	7.70E+00	0.00E+00	3.39E-02	7.73E+00	4
101	17.439	24.597	5	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
103	17.359	24.059	5	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.17E-02	1.64E+01	5
104	17.452	24.521	5	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
105	17.223	23.804	5	4.31E+00	0.00E+00	4.31E+00	4.31E+00	0.00E+00	1.90E-02	4.33E+00	3
106	17.181	24.103	5	1.14E+00	0.00E+00	1.14E+00	1.14E+00	0.00E+00	5.02E-03	1.15E+00	2
107	17.369	24.259	5	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
108	17.177	24.439	5	6.42E-01	0.00E+00	6.42E-01	6.42E-01	0.00E+00	2.82E-03	6.45E-01	2
109	17.196	24.503	5	6.04E+00	0.00E+00	6.04E+00	6.04E+00	0.00E+00	2.66E-02	6.07E+00	4
110	17.283	23.842	5	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
111	17.266	23.993	5	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
112	17.244	24.171	5	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
113	17.262	24.275	5	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.58E-02	1.96E+01	5
114	17.357	23.679	5	8.30E+00	0.00E+00	8.30E+00	8.30E+00	0.00E+00	3.65E-02	8.34E+00	4
115	17.323	24.549	5	4.05E+01	0.00E+00	4.05E+01	4.05E+01	0.00E+00	1.78E-01	4.07E+01	6
116	17.342	23.597	5	7.62E+00	0.00E+00	7.62E+00	7.62E+00	0.00E+00	3.35E-02	7.65E+00	4
117	17.349	23.785	5	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.88E-02	1.11E+01	4
118	17.359	23.524	5	4.61E+00	0.00E+00	4.61E+00	4.61E+00	0.00E+00	2.03E-02	4.63E+00	3
119	17.263	24.484	5	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
143	17.185	23.996	5	8.55E-01	0.00E+00	8.55E-01	8.55E-01	0.00E+00	3.76E-03	8.59E-01	2

Table F3
GB Exposure Estimates
Support Brigade

193	17.263	23.765	5	9.23E+00	0.00E+00	9.23E+00	9.23E+00	0.00E+00	4.06E-02	9.27E+00	4
195	17.552	24.359	5	2.71E+01	0.00E+00	2.71E+01	2.71E+01	0.00E+00	1.19E-01	2.72E+01	5
196	17.329	24.294	5	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.06E-01	2.41E+01	5
197	17.35	24.467	5	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.31E-01	2.98E+01	5
204	17.183	24.37	5	2.29E+00	0.00E+00	2.29E+00	2.29E+00	0.00E+00	1.01E-02	2.30E+00	2
206	17.314	24.187	5	2.11E+01	0.00E+00	2.11E+01	2.11E+01	0.00E+00	9.28E-02	2.12E+01	5
207	17.355	23.946	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
208	17.275	23.609	5	6.24E+00	0.00E+00	6.24E+00	6.24E+00	0.00E+00	2.75E-02	6.27E+00	4
209	17.266	24.069	5	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
210	17.248	24.378	5	1.91E+01	0.00E+00	1.91E+01	1.91E+01	0.00E+00	8.40E-02	1.92E+01	5
211	17.359	24.366	5	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
212	17.355	23.859	5	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
213	17.275	23.713	5	9.27E+00	0.00E+00	9.27E+00	9.27E+00	0.00E+00	4.08E-02	9.31E+00	4
253	17.471	24.264	5	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
254	17.479	23.766	5	5.00E+00	0.00E+00	5.00E+00	5.00E+00	0.00E+00	2.20E-02	5.02E+00	3
259	17.464	24.139	5	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.57E-02	8.16E+00	4
260	17.671	24.255	5	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
261	17.537	24.105	5	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
262	17.535	24.181	5	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
272	17.654	24.088	5	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
274	17.554	23.728	5	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
275	17.659	23.893	5	6.69E+00	0.00E+00	6.69E+00	6.69E+00	0.00E+00	2.94E-02	6.72E+00	4
276	17.445	23.969	5	2.23E+00	0.00E+00	2.23E+00	2.23E+00	0.00E+00	9.81E-03	2.24E+00	2
277	17.554	23.921	5	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
280	17.642	24.022	5	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
281	17.58	24.093	5	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.18E-02	1.87E+01	5
283	17.536	23.658	5	8.22E+00	0.00E+00	8.22E+00	8.22E+00	0.00E+00	3.62E-02	8.26E+00	4
284	17.455	23.844	5	1.14E+00	0.00E+00	1.14E+00	1.14E+00	0.00E+00	5.02E-03	1.15E+00	2
286	17.668	23.823	5	2.60E+00	0.00E+00	2.60E+00	2.60E+00	0.00E+00	1.14E-02	2.61E+00	2
288	17.572	23.825	5	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.72E-02	1.31E+01	4
289	17.538	23.994	5	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5

Case 2: Protected 2 rounds at aimpoint (12.20, 22.30)

296	12.417	22.105	5	0.00E+00	0.00E+00	0.00E+00	8.81E-01	0.00E+00	3.88E-03	3.88E-03	1
409	12.089	22.312	5	7.62E+00	0.00E+00	7.62E+00	1.03E+01	0.00E+00	4.53E-02	7.67E+00	4
436	12.341	22.32	5	7.14E+00	0.00E+00	7.14E+00	9.48E+00	0.00E+00	4.17E-02	7.18E+00	4

Sarin (GB) 250kg Bomb
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected Troops 12 rounds at aimpoint (17.20, 26.90)

3	17.181	23.524	2	3.76E+00	0.00E+00	3.76E+00	3.76E+00	0.00E+00	1.65E-02	3.78E+00	3
47	17.923	22.204	5	5.96E-01	0.00E+00	5.96E-01	5.96E-01	0.00E+00	2.62E-03	5.99E-01	2
48	17.187	23.651	5	4.49E+00	0.00E+00	4.49E+00	4.49E+00	0.00E+00	1.98E-02	4.51E+00	3
49	17.468	24.443	5	4.33E+01	0.00E+00	4.33E+01	4.33E+01	0.00E+00	1.91E-01	4.35E+01	6
50	17.487	24.398	5	4.17E+01	0.00E+00	4.17E+01	4.17E+01	0.00E+00	1.83E-01	4.19E+01	6
52	17.293	24.34	5	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
53	17.202	24.669	5	6.29E+00	0.00E+00	6.29E+00	6.29E+00	0.00E+00	2.77E-02	6.32E+00	4
54	17.418	24.675	5	4.83E+01	0.00E+00	4.83E+01	4.83E+01	0.00E+00	2.13E-01	4.85E+01	6
55	17.339	24.697	5	3.71E+01	0.00E+00	3.71E+01	3.71E+01	0.00E+00	1.63E-01	3.73E+01	6
56	17.274	24.597	5	1.99E+01	0.00E+00	1.99E+01	1.99E+01	0.00E+00	8.76E-02	2.00E+01	5
57	17.347	24.131	5	2.27E+01	0.00E+00	2.27E+01	2.27E+01	0.00E+00	9.99E-02	2.28E+01	5
58	17.336	24.001	5	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.54E-02	1.95E+01	5
59	17.205	23.842	5	6.12E+00	0.00E+00	6.12E+00	6.12E+00	0.00E+00	2.69E-02	6.15E+00	4
60	17.421	24.329	5	3.57E+01	0.00E+00	3.57E+01	3.57E+01	0.00E+00	1.57E-01	3.59E+01	6
85	17.884	22.396	5	2.49E+00	0.00E+00	2.49E+00	2.49E+00	0.00E+00	1.10E-02	2.50E+00	2
87	17.977	22.662	5	1.66E+00	0.00E+00	1.66E+00	1.66E+00	0.00E+00	7.30E-03	1.67E+00	2
91	17.898	22.639	5	3.82E+00	0.00E+00	3.82E+00	3.82E+00	0.00E+00	1.68E-02	3.84E+00	3
100	17.232	23.912	5	8.66E+00	0.00E+00	8.66E+00	8.66E+00	0.00E+00	3.81E-02	8.70E+00	4
101	17.439	24.597	5	4.71E+01	0.00E+00	4.71E+01	4.71E+01	0.00E+00	2.07E-01	4.73E+01	6
102	17.175	24.255	5	4.55E+00	0.00E+00	4.55E+00	4.55E+00	0.00E+00	2.00E-02	4.57E+00	3
103	17.359	24.059	5	2.25E+01	0.00E+00	2.25E+01	2.25E+01	0.00E+00	9.90E-02	2.26E+01	5

Table F3
GB Exposure Estimates
Support Brigade

104	17.452	24.521	5	4.54E+01	0.00E+00	4.54E+01	4.54E+01	0.00E+00	2.00E-01	4.56E+01	6
105	17.223	23.804	5	7.41E+00	0.00E+00	7.41E+00	7.41E+00	0.00E+00	3.26E-02	7.44E+00	4
106	17.181	24.103	5	4.94E+00	0.00E+00	4.94E+00	4.94E+00	0.00E+00	2.17E-02	4.96E+00	3
107	17.369	24.259	5	2.79E+01	0.00E+00	2.79E+01	2.79E+01	0.00E+00	1.23E-01	2.80E+01	5
108	17.177	24.439	5	4.88E+00	0.00E+00	4.88E+00	4.88E+00	0.00E+00	2.15E-02	4.90E+00	3
109	17.196	24.503	5	6.30E+00	0.00E+00	6.30E+00	6.30E+00	0.00E+00	2.77E-02	6.33E+00	4
110	17.283	23.842	5	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
111	17.266	23.993	5	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
112	17.244	24.171	5	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
113	17.262	24.275	5	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
114	17.357	23.679	5	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
115	17.323	24.549	5	3.00E+01	0.00E+00	3.00E+01	3.00E+01	0.00E+00	1.32E-01	3.01E+01	6
116	17.342	23.597	5	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
117	17.349	23.785	5	1.78E+01	0.00E+00	1.78E+01	1.78E+01	0.00E+00	7.83E-02	1.79E+01	5
118	17.359	23.524	5	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
119	17.263	24.484	5	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
126	17.927	22.304	5	9.82E-01	0.00E+00	9.82E-01	9.82E-01	0.00E+00	4.32E-03	9.86E-01	2
129	17.95	22.413	5	1.09E+00	0.00E+00	1.09E+00	1.09E+00	0.00E+00	4.80E-03	1.09E+00	2
143	17.185	23.996	5	5.19E+00	0.00E+00	5.19E+00	5.19E+00	0.00E+00	2.28E-02	5.21E+00	3
187	17.885	22.726	5	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.12E-02	4.83E+00	3
193	17.263	23.765	5	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
195	17.552	24.359	5	4.07E+01	0.00E+00	4.07E+01	4.07E+01	0.00E+00	1.79E-01	4.09E+01	6
196	17.329	24.294	5	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
197	17.35	24.467	5	3.28E+01	0.00E+00	3.28E+01	3.28E+01	0.00E+00	1.44E-01	3.29E+01	6
204	17.183	24.37	5	5.37E+00	0.00E+00	5.37E+00	5.37E+00	0.00E+00	2.36E-02	5.39E+00	3
206	17.314	24.187	5	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
207	17.355	23.946	5	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
208	17.275	23.609	5	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
209	17.266	24.069	5	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
210	17.248	24.378	5	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
211	17.359	24.366	5	3.05E+01	0.00E+00	3.05E+01	3.05E+01	0.00E+00	1.34E-01	3.06E+01	6
212	17.355	23.859	5	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
213	17.275	23.713	5	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
217	17.997	22.157	5	1.27E-02	0.00E+00	1.27E-02	1.27E-02	0.00E+00	5.59E-05	1.28E-02	1
252	18.082	22.652	5	6.94E-02	0.00E+00	6.94E-02	6.94E-02	0.00E+00	3.05E-04	6.97E-02	1
253	17.471	24.264	5	3.57E+01	0.00E+00	3.57E+01	3.57E+01	0.00E+00	1.57E-01	3.59E+01	6
254	17.479	23.766	5	2.44E+01	0.00E+00	2.44E+01	2.44E+01	0.00E+00	1.07E-01	2.45E+01	5
256	17.694	23.745	5	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
257	17.825	23.345	5	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
258	17.872	23.363	5	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
259	17.464	24.139	5	3.15E+01	0.00E+00	3.15E+01	3.15E+01	0.00E+00	1.39E-01	3.16E+01	6
260	17.671	24.255	5	3.61E+01	0.00E+00	3.61E+01	3.61E+01	0.00E+00	1.59E-01	3.63E+01	6
261	17.537	24.105	5	3.25E+01	0.00E+00	3.25E+01	3.25E+01	0.00E+00	1.43E-01	3.26E+01	6
262	17.535	24.181	5	3.43E+01	0.00E+00	3.43E+01	3.43E+01	0.00E+00	1.51E-01	3.45E+01	6
264	17.946	23.354	5	6.41E+00	0.00E+00	6.41E+00	6.41E+00	0.00E+00	2.82E-02	6.44E+00	4
266	17.871	23.446	5	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
272	17.654	24.088	5	3.22E+01	0.00E+00	3.22E+01	3.22E+01	0.00E+00	1.42E-01	3.23E+01	6
274	17.554	23.728	5	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
275	17.659	23.893	5	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5
276	17.445	23.969	5	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.19E-01	2.71E+01	5
277	17.554	23.921	5	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.26E-01	2.87E+01	5
278	17.752	24.26	5	3.38E+01	0.00E+00	3.38E+01	3.38E+01	0.00E+00	1.49E-01	3.39E+01	6
280	17.642	24.022	5	3.05E+01	0.00E+00	3.05E+01	3.05E+01	0.00E+00	1.34E-01	3.06E+01	6
281	17.58	24.093	5	3.22E+01	0.00E+00	3.22E+01	3.22E+01	0.00E+00	1.42E-01	3.23E+01	6
283	17.536	23.658	5	2.36E+01	0.00E+00	2.36E+01	2.36E+01	0.00E+00	1.04E-01	2.37E+01	5
284	17.455	23.844	5	2.51E+01	0.00E+00	2.51E+01	2.51E+01	0.00E+00	1.10E-01	2.52E+01	5
286	17.668	23.823	5	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
287	17.953	23.437	5	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.81E-02	6.41E+00	4
288	17.572	23.825	5	2.68E+01	0.00E+00	2.68E+01	2.68E+01	0.00E+00	1.18E-01	2.69E+01	5
289	17.538	23.994	5	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5
Case 2: Protected 12 rounds at aimpoint (17.40, 24.00)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	5.19E+01	0.00E+00	2.28E-01	2.28E-01	1
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	9.19E+01	0.00E+00	4.04E-01	4.04E-01	2
58	17.336	24.001	5	2.33E+01	0.00E+00	2.33E+01	4.38E+01	0.00E+00	1.93E-01	2.35E+01	5
59	17.205	23.842	5	2.08E+01	0.00E+00	2.08E+01	1.35E+02	0.00E+00	5.94E-01	2.14E+01	5
87	17.977	22.662	5	0.00E+00	0.00E+00	0.00E+00	1.41E-01	0.00E+00	6.20E-04	6.20E-04	1
91	17.898	22.639	5	0.00E+00	0.00E+00	0.00E+00	1.40E+00	0.00E+00	6.16E-03	6.16E-03	1

Table F3
GB Exposure Estimates
Support Brigade

100	17.232	23.912	5	8.46E+01	0.00E+00	8.46E+01	1.41E+02	0.00E+00	6.20E-01	8.52E+01	8
105	17.223	23.804	5	4.34E+01	0.00E+00	4.34E+01	1.44E+02	0.00E+00	6.34E-01	4.40E+01	6
110	17.283	23.842	5	4.25E+01	0.00E+00	4.25E+01	1.46E+02	0.00E+00	6.42E-01	4.31E+01	6
111	17.266	23.993	5	2.82E+01	0.00E+00	2.82E+01	5.19E+01	0.00E+00	2.28E-01	2.84E+01	5
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	1.73E+02	0.00E+00	7.61E-01	7.61E-01	2
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	1.81E+02	0.00E+00	7.96E-01	7.96E-01	2
117	17.349	23.785	5	6.63E+01	0.00E+00	6.63E+01	1.47E+02	0.00E+00	6.47E-01	6.69E+01	7
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	1.56E+02	0.00E+00	6.86E-01	6.86E-01	2
143	17.185	23.996	5	5.76E+01	0.00E+00	5.76E+01	1.09E+02	0.00E+00	4.80E-01	5.81E+01	7
187	17.885	22.726	5	0.00E+00	0.00E+00	0.00E+00	3.86E+00	0.00E+00	1.70E-02	1.70E-02	1
193	17.263	23.765	5	2.28E+01	0.00E+00	2.28E+01	1.45E+02	0.00E+00	6.38E-01	2.34E+01	5
207	17.355	23.946	5	1.75E+01	0.00E+00	1.75E+01	3.00E+01	0.00E+00	1.32E-01	1.76E+01	5
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	1.62E+02	0.00E+00	7.13E-01	7.13E-01	2
212	17.355	23.859	5	9.81E+01	0.00E+00	9.81E+01	1.73E+02	0.00E+00	7.61E-01	9.89E+01	8
213	17.275	23.713	5	6.09E-01	0.00E+00	6.09E-01	1.57E+02	0.00E+00	6.91E-01	1.30E+00	2
254	17.479	23.766	5	1.46E+01	0.00E+00	1.46E+01	1.47E+02	0.00E+00	6.47E-01	1.52E+01	5
256	17.694	23.745	5	5.31E-01	0.00E+00	5.31E-01	1.49E+02	0.00E+00	6.56E-01	1.19E+00	2
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	2.43E+01	0.00E+00	1.07E-01	1.07E-01	1
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	1.05E+00	0.00E+00	4.62E-03	4.62E-03	1
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	2.34E-01	0.00E+00	1.03E-03	1.03E-03	1
274	17.554	23.728	5	3.04E+00	0.00E+00	3.04E+00	1.54E+02	0.00E+00	6.78E-01	3.72E+00	3
275	17.659	23.893	5	9.88E+01	0.00E+00	9.88E+01	1.72E+02	0.00E+00	7.57E-01	9.96E+01	8
276	17.445	23.969	5	1.04E+01	0.00E+00	1.04E+01	1.78E+01	0.00E+00	7.83E-02	1.05E+01	4
277	17.554	23.921	5	6.05E+01	0.00E+00	6.05E+01	1.06E+02	0.00E+00	4.66E-01	6.10E+01	7
280	17.642	24.022	5	8.90E+00	0.00E+00	8.90E+00	1.58E+01	0.00E+00	6.95E-02	8.97E+00	4
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	1.72E+02	0.00E+00	7.57E-01	7.57E-01	2
284	17.455	23.844	5	9.70E+01	0.00E+00	9.70E+01	1.71E+02	0.00E+00	7.52E-01	9.78E+01	8
286	17.668	23.823	5	6.47E+01	0.00E+00	6.47E+01	1.52E+02	0.00E+00	6.69E-01	6.54E+01	7
288	17.572	23.825	5	5.78E+01	0.00E+00	5.78E+01	1.51E+02	0.00E+00	6.64E-01	5.85E+01	7
289	17.538	23.994	5	2.30E+01	0.00E+00	2.30E+01	4.11E+01	0.00E+00	1.81E-01	2.32E+01	5

Sarin (GB) 250kg Bomb
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 24 rounds at aimpoint (17.20, 28.10)											
3	17.181	23.524	2	9.83E+00	0.00E+00	9.83E+00	9.83E+00	0.00E+00	4.33E-02	9.87E+00	4
5	16.903	27.198	3	4.33E+00	0.00E+00	4.33E+00	4.33E+00	0.00E+00	1.91E-02	4.35E+00	3
8	17.462	26.876	5	1.08E+02	0.00E+00	1.08E+02	1.08E+02	0.00E+00	4.75E-01	1.08E+02	8
9	17.366	26.775	5	1.01E+02	0.00E+00	1.01E+02	1.01E+02	0.00E+00	4.44E-01	1.01E+02	8
11	17.742	26.629	5	3.15E+00	0.00E+00	3.15E+00	3.15E+00	0.00E+00	1.39E-02	3.16E+00	3
13	17.46	26.751	5	9.47E+01	0.00E+00	9.47E+01	9.47E+01	0.00E+00	4.17E-01	9.51E+01	8
48	17.187	23.651	5	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
49	17.468	24.443	5	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.62E-02	1.97E+01	5
50	17.487	24.398	5	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
52	17.293	24.34	5	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
53	17.202	24.669	5	2.66E+01	0.00E+00	2.66E+01	2.66E+01	0.00E+00	1.17E-01	2.67E+01	5
54	17.418	24.675	5	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
55	17.339	24.697	5	2.84E+01	0.00E+00	2.84E+01	2.84E+01	0.00E+00	1.25E-01	2.85E+01	5
56	17.274	24.597	5	2.71E+01	0.00E+00	2.71E+01	2.71E+01	0.00E+00	1.19E-01	2.72E+01	5
57	17.347	24.131	5	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.49E-02	1.94E+01	5
58	17.336	24.001	5	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.66E-02	1.75E+01	5
59	17.205	23.842	5	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
60	17.421	24.329	5	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
61	17.701	26.488	5	9.83E+00	0.00E+00	9.83E+00	9.83E+00	0.00E+00	4.33E-02	9.87E+00	4
62	17.464	26.662	5	8.67E+01	0.00E+00	8.67E+01	8.67E+01	0.00E+00	3.81E-01	8.71E+01	8
68	17.659	26.754	5	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
69	17.555	26.861	5	7.95E+01	0.00E+00	7.95E+01	7.95E+01	0.00E+00	3.50E-01	7.98E+01	8
71	17.598	26.569	5	4.21E+01	0.00E+00	4.21E+01	4.21E+01	0.00E+00	1.85E-01	4.23E+01	6
72	17.445	26.254	5	6.66E+01	0.00E+00	6.66E+01	6.66E+01	0.00E+00	2.93E-01	6.69E+01	7
73	17.815	26.257	5	8.39E-01	0.00E+00	8.39E-01	8.39E-01	0.00E+00	3.69E-03	8.43E-01	2
74	17.693	26.866	5	7.45E+00	0.00E+00	7.45E+00	7.45E+00	0.00E+00	3.28E-02	7.48E+00	4

Table F3
GB Exposure Estimates
Support Brigade

75	17.678	26.639	5	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
76	17.409	26.724	5	9.61E+01	0.00E+00	9.61E+01	9.61E+01	0.00E+00	4.23E-01	9.65E+01	8
77	17.784	26.491	5	1.34E+00	0.00E+00	1.34E+00	1.34E+00	0.00E+00	5.90E-03	1.35E+00	2
82	17.332	26.414	5	7.98E+01	0.00E+00	7.98E+01	7.98E+01	0.00E+00	3.51E-01	8.02E+01	8
84	17.736	26.324	5	6.24E+00	0.00E+00	6.24E+00	6.24E+00	0.00E+00	2.75E-02	6.27E+00	4
86	17.487	26.466	5	7.13E+01	0.00E+00	7.13E+01	7.13E+01	0.00E+00	3.14E-01	7.16E+01	7
93	17.348	26.251	5	7.20E+01	0.00E+00	7.20E+01	7.20E+01	0.00E+00	3.17E-01	7.23E+01	7
94	17.418	26.441	5	7.84E+01	0.00E+00	7.84E+01	7.84E+01	0.00E+00	3.45E-01	7.87E+01	8
98	17.59	26.733	5	5.12E+01	0.00E+00	5.12E+01	5.12E+01	0.00E+00	2.25E-01	5.14E+01	7
99	17.775	26.941	5	1.66E-01	0.00E+00	1.66E-01	1.66E-01	0.00E+00	7.30E-04	1.67E-01	1
100	17.232	23.912	5	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.91E-02	1.58E+01	5
101	17.439	24.597	5	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
102	17.175	24.255	5	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.58E-02	1.96E+01	5
103	17.359	24.059	5	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
104	17.452	24.521	5	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5
105	17.223	23.804	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
106	17.181	24.103	5	1.75E+01	0.00E+00	1.75E+01	1.75E+01	0.00E+00	7.70E-02	1.76E+01	5
107	17.369	24.259	5	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.15E-02	2.09E+01	5
108	17.177	24.439	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
109	17.196	24.503	5	2.36E+01	0.00E+00	2.36E+01	2.36E+01	0.00E+00	1.04E-01	2.37E+01	5
110	17.283	23.842	5	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
111	17.266	23.993	5	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.66E-02	1.75E+01	5
112	17.244	24.171	5	2.00E+01	0.00E+00	2.00E+01	2.00E+01	0.00E+00	8.80E-02	2.01E+01	5
113	17.262	24.275	5	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.64E-02	2.20E+01	5
114	17.357	23.679	5	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
115	17.323	24.549	5	2.62E+01	0.00E+00	2.62E+01	2.62E+01	0.00E+00	1.15E-01	2.63E+01	5
116	17.342	23.597	5	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
117	17.349	23.785	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
118	17.359	23.524	5	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
119	17.263	24.484	5	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
143	17.185	23.996	5	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.08E-02	1.62E+01	5
158	17.797	26.587	5	3.62E-01	0.00E+00	3.62E-01	3.62E-01	0.00E+00	1.59E-03	3.64E-01	2
167	16.907	27.604	5	5.03E-01	0.00E+00	5.03E-01	5.03E-01	0.00E+00	2.21E-03	5.05E-01	2
193	17.263	23.765	5	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
195	17.552	24.359	5	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
196	17.329	24.294	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5
197	17.35	24.467	5	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
199	17.47	26.332	5	6.72E+01	0.00E+00	6.72E+01	6.72E+01	0.00E+00	2.96E-01	6.75E+01	7
200	17.542	26.309	5	5.17E+01	0.00E+00	5.17E+01	5.17E+01	0.00E+00	2.27E-01	5.19E+01	7
203	17.342	26.573	5	8.74E+01	0.00E+00	8.74E+01	8.74E+01	0.00E+00	3.85E-01	8.78E+01	8
204	17.183	24.37	5	2.13E+01	0.00E+00	2.13E+01	2.13E+01	0.00E+00	9.37E-02	2.14E+01	5
206	17.314	24.187	5	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5
207	17.355	23.946	5	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5
208	17.275	23.609	5	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
209	17.266	24.069	5	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
210	17.248	24.378	5	2.32E+01	0.00E+00	2.32E+01	2.32E+01	0.00E+00	1.02E-01	2.33E+01	5
211	17.359	24.366	5	2.26E+01	0.00E+00	2.26E+01	2.26E+01	0.00E+00	9.94E-02	2.27E+01	5
212	17.355	23.859	5	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
213	17.275	23.713	5	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
235	17.54	26.653	5	6.83E+01	0.00E+00	6.83E+01	6.83E+01	0.00E+00	3.01E-01	6.86E+01	7
240	17.624	26.382	5	3.03E+01	0.00E+00	3.03E+01	3.03E+01	0.00E+00	1.33E-01	3.04E+01	6
242	17.453	26.585	5	8.34E+01	0.00E+00	8.34E+01	8.34E+01	0.00E+00	3.67E-01	8.38E+01	8
245	17.342	26.693	5	9.47E+01	0.00E+00	9.47E+01	9.47E+01	0.00E+00	4.17E-01	9.51E+01	8
246	17.56	26.496	5	5.39E+01	0.00E+00	5.39E+01	5.39E+01	0.00E+00	2.37E-01	5.41E+01	7
247	17.618	26.228	5	2.95E+01	0.00E+00	2.95E+01	2.95E+01	0.00E+00	1.30E-01	2.96E+01	5
248	17.528	26.754	5	7.98E+01	0.00E+00	7.98E+01	7.98E+01	0.00E+00	3.51E-01	8.02E+01	8
249	17.733	26.756	5	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.38E-02	3.15E+00	3
253	17.471	24.264	5	1.72E+01	0.00E+00	1.72E+01	1.72E+01	0.00E+00	7.57E-02	1.73E+01	5
254	17.479	23.766	5	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.88E-02	1.11E+01	4
256	17.694	23.745	5	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.43E-02	3.26E+00	3
259	17.464	24.139	5	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
260	17.671	24.255	5	6.72E+00	0.00E+00	6.72E+00	6.72E+00	0.00E+00	2.96E-02	6.75E+00	4
261	17.537	24.105	5	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
262	17.535	24.181	5	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
272	17.654	24.088	5	6.45E+00	0.00E+00	6.45E+00	6.45E+00	0.00E+00	2.84E-02	6.48E+00	4
274	17.554	23.728	5	8.15E+00	0.00E+00	8.15E+00	8.15E+00	0.00E+00	3.59E-02	8.19E+00	4
275	17.659	23.893	5	5.27E+00	0.00E+00	5.27E+00	5.27E+00	0.00E+00	2.32E-02	5.29E+00	3

Table F3
GB Exposure Estimates
Support Brigade

276	17.445	23.969	5	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
277	17.554	23.921	5	9.83E+00	0.00E+00	9.83E+00	9.83E+00	0.00E+00	4.33E-02	9.87E+00	4
278	17.752	24.26	5	3.14E+00	0.00E+00	3.14E+00	3.14E+00	0.00E+00	1.38E-02	3.15E+00	3
280	17.642	24.022	5	6.68E+00	0.00E+00	6.68E+00	6.68E+00	0.00E+00	2.94E-02	6.71E+00	4
281	17.58	24.093	5	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
283	17.536	23.658	5	8.11E+00	0.00E+00	8.11E+00	8.11E+00	0.00E+00	3.57E-02	8.15E+00	4
284	17.455	23.844	5	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
286	17.668	23.823	5	4.48E+00	0.00E+00	4.48E+00	4.48E+00	0.00E+00	1.97E-02	4.50E+00	3
288	17.572	23.825	5	8.19E+00	0.00E+00	8.19E+00	8.19E+00	0.00E+00	3.60E-02	8.23E+00	4
289	17.538	23.994	5	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
299	16.908	25.062	5	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
358	16.83	25.172	5	5.05E+00	0.00E+00	5.05E+00	5.05E+00	0.00E+00	2.22E-02	5.07E+00	3
361	16.793	25.451	5	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.35E-02	3.07E+00	3
414	16.882	25.906	5	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
419	16.952	22.92	5	5.23E-01	0.00E+00	5.23E-01	5.23E-01	0.00E+00	2.30E-03	5.25E-01	2
463	16.889	25.306	5	9.81E+00	0.00E+00	9.81E+00	9.81E+00	0.00E+00	4.32E-02	9.85E+00	4
464	16.909	25.522	5	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
465	16.79	25.73	5	2.79E+00	0.00E+00	2.79E+00	2.79E+00	0.00E+00	1.23E-02	2.80E+00	2

Case 2: Protected 24 rounds at aimpoint (17.50, 24.00)

47	17.923	22.204	5	0.00E+00	0.00E+00	0.00E+00	1.68E+00	0.00E+00	7.39E-03	7.39E-03	1
58	17.336	24.001	5	2.04E+01	0.00E+00	2.04E+01	3.15E+01	0.00E+00	1.39E-01	2.05E+01	5
85	17.884	22.396	5	0.00E+00	0.00E+00	0.00E+00	1.67E+01	0.00E+00	7.35E-02	7.35E-02	1
87	17.977	22.662	5	0.00E+00	0.00E+00	0.00E+00	1.16E+01	0.00E+00	5.10E-02	5.10E-02	1
91	17.898	22.639	5	0.00E+00	0.00E+00	0.00E+00	3.95E+01	0.00E+00	1.74E-01	1.74E-01	1
110	17.283	23.842	5	3.95E+01	0.00E+00	3.95E+01	1.03E+02	0.00E+00	4.53E-01	4.00E+01	6
111	17.266	23.993	5	2.53E+01	0.00E+00	2.53E+01	3.89E+01	0.00E+00	1.71E-01	2.55E+01	5
114	17.357	23.679	5	9.01E+01	0.00E+00	9.01E+01	3.00E+02	0.00E+00	1.32E+00	9.14E+01	8
116	17.342	23.597	5	7.37E+01	0.00E+00	7.37E+01	3.16E+02	0.00E+00	1.39E+00	7.51E+01	8
117	17.349	23.785	5	7.37E+01	0.00E+00	7.37E+01	1.56E+02	0.00E+00	6.86E-01	7.44E+01	7
118	17.359	23.524	5	2.05E+01	0.00E+00	2.05E+01	2.97E+02	0.00E+00	1.31E+00	2.18E+01	5
126	17.927	22.304	5	0.00E+00	0.00E+00	0.00E+00	5.36E+00	0.00E+00	2.36E-02	2.36E-02	1
127	18.068	22.411	5	0.00E+00	0.00E+00	0.00E+00	5.46E-01	0.00E+00	2.40E-03	2.40E-03	1
129	17.95	22.413	5	0.00E+00	0.00E+00	0.00E+00	8.67E+00	0.00E+00	3.81E-02	3.81E-02	1
131	18.022	22.275	5	0.00E+00	0.00E+00	0.00E+00	7.98E-01	0.00E+00	3.51E-03	3.51E-03	1
187	17.885	22.726	5	0.00E+00	0.00E+00	0.00E+00	5.30E+01	0.00E+00	2.33E-01	2.33E-01	1
193	17.263	23.765	5	2.61E+01	0.00E+00	2.61E+01	7.47E+01	0.00E+00	3.29E-01	2.64E+01	5
207	17.355	23.946	5	1.82E+01	0.00E+00	1.82E+01	2.70E+01	0.00E+00	1.19E-01	1.83E+01	5
208	17.275	23.609	5	5.05E+00	0.00E+00	5.05E+00	1.20E+02	0.00E+00	5.28E-01	5.58E+00	3
212	17.355	23.859	5	1.04E+02	0.00E+00	1.04E+02	1.62E+02	0.00E+00	7.13E-01	1.05E+02	8
213	17.275	23.713	5	4.79E+01	0.00E+00	4.79E+01	1.46E+02	0.00E+00	6.42E-01	4.85E+01	6
217	17.997	22.157	5	0.00E+00	0.00E+00	0.00E+00	2.29E-01	0.00E+00	1.01E-03	1.01E-03	1
218	18.129	22.348	5	0.00E+00	0.00E+00	0.00E+00	1.50E-02	0.00E+00	6.60E-05	6.60E-05	1
252	18.082	22.652	5	0.00E+00	0.00E+00	0.00E+00	3.62E-01	0.00E+00	1.59E-03	1.59E-03	1
254	17.479	23.766	5	8.56E+01	0.00E+00	8.56E+01	2.32E+02	0.00E+00	1.02E+00	8.66E+01	8
256	17.694	23.745	5	1.02E+02	0.00E+00	1.02E+02	2.87E+02	0.00E+00	1.26E+00	1.03E+02	8
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	2.31E+02	0.00E+00	1.02E+00	1.02E+00	2
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	1.80E+02	0.00E+00	7.92E-01	7.92E-01	2
264	17.946	23.354	5	0.00E+00	0.00E+00	0.00E+00	7.48E+00	0.00E+00	3.29E-02	3.29E-02	1
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	1.94E+02	0.00E+00	8.54E-01	8.54E-01	2
274	17.554	23.728	5	6.65E+01	0.00E+00	6.65E+01	2.18E+02	0.00E+00	9.59E-01	6.75E+01	7
275	17.659	23.893	5	9.28E+01	0.00E+00	9.28E+01	1.40E+02	0.00E+00	6.16E-01	9.34E+01	8
276	17.445	23.969	5	1.01E+01	0.00E+00	1.01E+01	1.54E+01	0.00E+00	6.78E-02	1.02E+01	4
277	17.554	23.921	5	5.48E+01	0.00E+00	5.48E+01	8.17E+01	0.00E+00	3.59E-01	5.52E+01	7
280	17.642	24.022	5	7.94E+00	0.00E+00	7.94E+00	1.17E+01	0.00E+00	5.15E-02	7.99E+00	4
283	17.536	23.658	5	9.32E+01	0.00E+00	9.32E+01	3.15E+02	0.00E+00	1.39E+00	9.46E+01	8
284	17.455	23.844	5	1.04E+02	0.00E+00	1.04E+02	1.66E+02	0.00E+00	7.30E-01	1.05E+02	8
286	17.668	23.823	5	8.86E+01	0.00E+00	8.86E+01	1.79E+02	0.00E+00	7.88E-01	8.94E+01	8
287	17.953	23.437	5	0.00E+00	0.00E+00	0.00E+00	3.75E-01	0.00E+00	1.65E-03	1.65E-03	1
288	17.572	23.825	5	8.56E+01	0.00E+00	8.56E+01	1.79E+02	0.00E+00	7.88E-01	8.64E+01	8
289	17.538	23.994	5	2.09E+01	0.00E+00	2.09E+01	3.13E+01	0.00E+00	1.38E-01	2.10E+01	5

Sarin (GB) 250kg TBM
Light Attack

Height of Release: 0m

Inhalation	Percutaneous	Total
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Table F3
GB Exposure Estimates
Support Brigade

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected Troops 1 round at aimpoint (17.30, 26.70)											
3	17.181	23.524	2	2.76E+00	0.00E+00	2.76E+00	2.76E+00	0.00E+00	1.21E-02	2.77E+00	2
48	17.187	23.651	5	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.48E-02	3.37E+00	3
49	17.468	24.443	5	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
50	17.487	24.398	5	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
52	17.293	24.34	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
53	17.202	24.669	5	7.89E+00	0.00E+00	7.89E+00	7.89E+00	0.00E+00	3.47E-02	7.92E+00	4
54	17.418	24.675	5	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
55	17.339	24.697	5	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
56	17.274	24.597	5	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
57	17.347	24.131	5	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
58	17.336	24.001	5	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
59	17.205	23.842	5	5.34E+00	0.00E+00	5.34E+00	5.34E+00	0.00E+00	2.35E-02	5.36E+00	3
60	17.421	24.329	5	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
72	17.445	26.254	5	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
76	17.409	26.724	5	3.63E-04	0.00E+00	3.63E-04	3.63E-04	0.00E+00	1.60E-06	3.65E-04	1
82	17.332	26.414	5	2.77E+02	0.00E+00	2.77E+02	2.77E+02	0.00E+00	1.22E+00	2.78E+02	8
93	17.348	26.251	5	6.77E+02	0.00E+00	6.77E+02	6.77E+02	0.00E+00	2.98E+00	6.80E+02	8
94	17.418	26.441	5	6.69E+01	0.00E+00	6.69E+01	6.69E+01	0.00E+00	2.94E-01	6.72E+01	7
100	17.232	23.912	5	6.80E+00	0.00E+00	6.80E+00	6.80E+00	0.00E+00	2.99E-02	6.83E+00	4
101	17.439	24.597	5	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
102	17.175	24.255	5	5.06E+00	0.00E+00	5.06E+00	5.06E+00	0.00E+00	2.23E-02	5.08E+00	3
103	17.359	24.059	5	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
104	17.452	24.521	5	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
105	17.223	23.804	5	5.65E+00	0.00E+00	5.65E+00	5.65E+00	0.00E+00	2.49E-02	5.67E+00	3
106	17.181	24.103	5	4.80E+00	0.00E+00	4.80E+00	4.80E+00	0.00E+00	2.11E-02	4.82E+00	3
107	17.369	24.259	5	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5
108	17.177	24.439	5	5.45E+00	0.00E+00	5.45E+00	5.45E+00	0.00E+00	2.40E-02	5.47E+00	3
109	17.196	24.503	5	6.87E+00	0.00E+00	6.87E+00	6.87E+00	0.00E+00	3.02E-02	6.90E+00	4
110	17.283	23.842	5	8.35E+00	0.00E+00	8.35E+00	8.35E+00	0.00E+00	3.67E-02	8.39E+00	4
111	17.266	23.993	5	8.52E+00	0.00E+00	8.52E+00	8.52E+00	0.00E+00	3.75E-02	8.56E+00	4
112	17.244	24.171	5	8.48E+00	0.00E+00	8.48E+00	8.48E+00	0.00E+00	3.73E-02	8.52E+00	4
113	17.262	24.275	5	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
114	17.357	23.679	5	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
115	17.323	24.549	5	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
116	17.342	23.597	5	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
117	17.349	23.785	5	8.94E+00	0.00E+00	8.94E+00	8.94E+00	0.00E+00	3.93E-02	8.98E+00	4
118	17.359	23.524	5	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
119	17.263	24.484	5	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
143	17.185	23.996	5	4.79E+00	0.00E+00	4.79E+00	4.79E+00	0.00E+00	2.11E-02	4.81E+00	3
193	17.263	23.765	5	7.19E+00	0.00E+00	7.19E+00	7.19E+00	0.00E+00	3.16E-02	7.22E+00	4
195	17.552	24.359	5	6.06E+00	0.00E+00	6.06E+00	6.06E+00	0.00E+00	2.67E-02	6.09E+00	4
196	17.329	24.294	5	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
197	17.35	24.467	5	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5
199	17.47	26.332	5	2.69E-02	0.00E+00	2.69E-02	2.69E-02	0.00E+00	1.18E-04	2.70E-02	1
203	17.342	26.573	5	1.16E+02	0.00E+00	1.16E+02	1.16E+02	0.00E+00	5.10E-01	1.17E+02	8
204	17.183	24.37	5	5.75E+00	0.00E+00	5.75E+00	5.75E+00	0.00E+00	2.53E-02	5.78E+00	3
206	17.314	24.187	5	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
207	17.355	23.946	5	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
208	17.275	23.609	5	6.57E+00	0.00E+00	6.57E+00	6.57E+00	0.00E+00	2.89E-02	6.60E+00	4
209	17.266	24.069	5	9.10E+00	0.00E+00	9.10E+00	9.10E+00	0.00E+00	4.00E-02	9.14E+00	4
210	17.248	24.378	5	9.85E+00	0.00E+00	9.85E+00	9.85E+00	0.00E+00	4.33E-02	9.89E+00	4
211	17.359	24.366	5	2.21E+01	0.00E+00	2.21E+01	2.21E+01	0.00E+00	9.72E-02	2.22E+01	5
212	17.355	23.859	5	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.85E-02	1.34E+01	4
213	17.275	23.713	5	7.09E+00	0.00E+00	7.09E+00	7.09E+00	0.00E+00	3.12E-02	7.12E+00	4
245	17.342	26.693	5	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
253	17.471	24.264	5	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
254	17.479	23.766	5	7.30E+00	0.00E+00	7.30E+00	7.30E+00	0.00E+00	3.21E-02	7.33E+00	4
259	17.464	24.139	5	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
261	17.537	24.105	5	6.32E+00	0.00E+00	6.32E+00	6.32E+00	0.00E+00	2.78E-02	6.35E+00	4
262	17.535	24.181	5	6.69E+00	0.00E+00	6.69E+00	6.69E+00	0.00E+00	2.94E-02	6.72E+00	4
274	17.554	23.728	5	3.92E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00	1.72E-02	3.94E+00	3
276	17.445	23.969	5	9.37E+00	0.00E+00	9.37E+00	9.37E+00	0.00E+00	4.12E-02	9.41E+00	4

Table F3
GB Exposure Estimates
Support Brigade

277	17.554	23.921	5	4.37E+00	0.00E+00	4.37E+00	4.37E+00	0.00E+00	1.92E-02	4.39E+00	3
281	17.58	24.093	5	3.29E+00	0.00E+00	3.29E+00	3.29E+00	0.00E+00	1.45E-02	3.30E+00	3
283	17.536	23.658	5	4.50E+00	0.00E+00	4.50E+00	4.50E+00	0.00E+00	1.98E-02	4.52E+00	3
284	17.455	23.844	5	8.44E+00	0.00E+00	8.44E+00	8.44E+00	0.00E+00	3.71E-02	8.48E+00	4
288	17.572	23.825	5	3.39E+00	0.00E+00	3.39E+00	3.39E+00	0.00E+00	1.49E-02	3.40E+00	3
289	17.538	23.994	5	5.62E+00	0.00E+00	5.62E+00	5.62E+00	0.00E+00	2.47E-02	5.64E+00	3

Case 2: Protected 1 round at aimpoint (16.50, 27.50)

233	16.534	27.462	5	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
236	16.567	27.342	5	6.93E+00	0.00E+00	6.93E+00	4.41E+03	0.00E+00	1.94E+01	2.63E+01	5

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected Troops 2 rounds at aimpoint (17.50, 28.60)												
3	17.181	23.524	2	3.84E+00	0.00E+00	3.84E+00	3.84E+00	0.00E+00	1.69E-02	3.86E+00	3	
8	17.462	26.876	5	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5	
9	17.366	26.775	5	3.32E+01	0.00E+00	3.32E+01	3.32E+01	0.00E+00	1.46E-01	3.33E+01	6	
10	18.147	27.56	5	8.89E+00	0.00E+00	8.89E+00	8.89E+00	0.00E+00	3.91E-02	8.93E+00	4	
11	17.742	26.629	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3	
12	18.13	27.247	5	3.38E+01	0.00E+00	3.38E+01	3.38E+01	0.00E+00	1.49E-01	3.39E+01	6	
13	17.46	26.751	5	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5	
19	18.212	27.476	5	6.53E-01	0.00E+00	6.53E-01	6.53E-01	0.00E+00	2.87E-03	6.56E-01	2	
21	18.222	27.296	5	1.81E+00	0.00E+00	1.81E+00	1.81E+00	0.00E+00	7.96E-03	1.82E+00	2	
23	18.087	27.398	5	8.83E+01	0.00E+00	8.83E+01	8.83E+01	0.00E+00	3.89E-01	8.87E+01	8	
31	18.118	27.716	5	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5	
33	18.081	27.914	5	1.03E+02	0.00E+00	1.03E+02	1.03E+02	0.00E+00	4.53E-01	1.03E+02	8	
47	17.923	22.204	5	3.13E+00	0.00E+00	3.13E+00	3.13E+00	0.00E+00	1.38E-02	3.14E+00	3	
48	17.187	23.651	5	4.18E+00	0.00E+00	4.18E+00	4.18E+00	0.00E+00	1.84E-02	4.20E+00	3	
49	17.468	24.443	5	7.26E+00	0.00E+00	7.26E+00	7.26E+00	0.00E+00	3.19E-02	7.29E+00	4	
50	17.487	24.398	5	7.02E+00	0.00E+00	7.02E+00	7.02E+00	0.00E+00	3.09E-02	7.05E+00	4	
52	17.293	24.34	5	7.05E+00	0.00E+00	7.05E+00	7.05E+00	0.00E+00	3.10E-02	7.08E+00	4	
53	17.202	24.669	5	6.48E+00	0.00E+00	6.48E+00	6.48E+00	0.00E+00	2.85E-02	6.51E+00	4	
54	17.418	24.675	5	8.32E+00	0.00E+00	8.32E+00	8.32E+00	0.00E+00	3.66E-02	8.36E+00	4	
55	17.339	24.697	5	8.45E+00	0.00E+00	8.45E+00	8.45E+00	0.00E+00	3.72E-02	8.49E+00	4	
56	17.274	24.597	5	7.36E+00	0.00E+00	7.36E+00	7.36E+00	0.00E+00	3.24E-02	7.39E+00	4	
57	17.347	24.131	5	6.68E+00	0.00E+00	6.68E+00	6.68E+00	0.00E+00	2.94E-02	6.71E+00	4	
58	17.336	24.001	5	6.51E+00	0.00E+00	6.51E+00	6.51E+00	0.00E+00	2.86E-02	6.54E+00	4	
59	17.205	23.842	5	4.60E+00	0.00E+00	4.60E+00	4.60E+00	0.00E+00	2.02E-02	4.62E+00	3	
60	17.421	24.329	5	7.21E+00	0.00E+00	7.21E+00	7.21E+00	0.00E+00	3.17E-02	7.24E+00	4	
61	17.701	26.488	5	4.60E+00	0.00E+00	4.60E+00	4.60E+00	0.00E+00	2.02E-02	4.62E+00	3	
62	17.464	26.662	5	2.20E+01	0.00E+00	2.20E+01	2.20E+01	0.00E+00	9.68E-02	2.21E+01	5	
68	17.659	26.754	5	3.85E+00	0.00E+00	3.85E+00	3.85E+00	0.00E+00	1.69E-02	3.87E+00	3	
69	17.555	26.861	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4	
70	18.282	22.39	5	5.48E-01	0.00E+00	5.48E-01	5.48E-01	0.00E+00	2.41E-03	5.50E-01	2	
71	17.598	26.569	5	8.39E+00	0.00E+00	8.39E+00	8.39E+00	0.00E+00	3.69E-02	8.43E+00	4	
72	17.445	26.254	5	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5	
73	17.815	26.257	5	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4	
74	17.693	26.866	5	1.60E+00	0.00E+00	1.60E+00	1.60E+00	0.00E+00	7.04E-03	1.61E+00	2	
75	17.678	26.639	5	3.94E+00	0.00E+00	3.94E+00	3.94E+00	0.00E+00	1.73E-02	3.96E+00	3	
76	17.409	26.724	5	2.98E+01	0.00E+00	2.98E+01	2.98E+01	0.00E+00	1.31E-01	2.99E+01	5	
77	17.784	26.491	5	8.39E+00	0.00E+00	8.39E+00	8.39E+00	0.00E+00	3.69E-02	8.43E+00	4	
78	17.875	26.374	5	1.96E+01	0.00E+00	1.96E+01	1.96E+01	0.00E+00	8.62E-02	1.97E+01	5	
79	18.238	22.525	5	1.97E+00	0.00E+00	1.97E+00	1.97E+00	0.00E+00	8.67E-03	1.98E+00	2	
81	17.87	26.656	5	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5	
82	17.332	26.414	5	2.03E+01	0.00E+00	2.03E+01	2.03E+01	0.00E+00	8.93E-02	2.04E+01	5	
84	17.736	26.324	5	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.75E-02	6.28E+00	4	
85	17.884	22.396	5	3.39E+00	0.00E+00	3.39E+00	3.39E+00	0.00E+00	1.49E-02	3.40E+00	3	
86	17.487	26.466	5	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5	

Table F3
GB Exposure Estimates
Support Brigade

87	17.977	22.662	5	4.28E+00	0.00E+00	4.28E+00	4.28E+00	0.00E+00	1.88E-02	4.30E+00	3
89	18.29	22.615	5	1.13E+00	0.00E+00	1.13E+00	1.13E+00	0.00E+00	4.97E-03	1.13E+00	2
91	17.898	22.639	5	3.84E+00	0.00E+00	3.84E+00	3.84E+00	0.00E+00	1.69E-02	3.86E+00	3
92	18.185	22.679	5	3.08E+00	0.00E+00	3.08E+00	3.08E+00	0.00E+00	1.36E-02	3.09E+00	3
93	17.348	26.251	5	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
94	17.418	26.441	5	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.15E-02	2.09E+01	5
95	17.937	26.836	5	6.47E+01	0.00E+00	6.47E+01	6.47E+01	0.00E+00	2.85E-01	6.50E+01	7
98	17.59	26.733	5	8.95E+00	0.00E+00	8.95E+00	8.95E+00	0.00E+00	3.94E-02	8.99E+00	4
99	17.775	26.941	5	6.07E+00	0.00E+00	6.07E+00	6.07E+00	0.00E+00	2.67E-02	6.10E+00	4
100	17.232	23.912	5	5.16E+00	0.00E+00	5.16E+00	5.16E+00	0.00E+00	2.27E-02	5.18E+00	3
101	17.439	24.597	5	7.78E+00	0.00E+00	7.78E+00	7.78E+00	0.00E+00	3.42E-02	7.81E+00	4
102	17.175	24.255	5	5.10E+00	0.00E+00	5.10E+00	5.10E+00	0.00E+00	2.24E-02	5.12E+00	3
103	17.359	24.059	5	6.62E+00	0.00E+00	6.62E+00	6.62E+00	0.00E+00	2.91E-02	6.65E+00	4
104	17.452	24.521	5	7.53E+00	0.00E+00	7.53E+00	7.53E+00	0.00E+00	3.31E-02	7.56E+00	4
105	17.223	23.804	5	4.85E+00	0.00E+00	4.85E+00	4.85E+00	0.00E+00	2.13E-02	4.87E+00	3
106	17.181	24.103	5	4.97E+00	0.00E+00	4.97E+00	4.97E+00	0.00E+00	2.19E-02	4.99E+00	3
107	17.369	24.259	5	7.01E+00	0.00E+00	7.01E+00	7.01E+00	0.00E+00	3.08E-02	7.04E+00	4
108	17.177	24.439	5	5.44E+00	0.00E+00	5.44E+00	5.44E+00	0.00E+00	2.39E-02	5.46E+00	3
109	17.196	24.503	5	5.97E+00	0.00E+00	5.97E+00	5.97E+00	0.00E+00	2.63E-02	6.00E+00	3
110	17.283	23.842	5	5.68E+00	0.00E+00	5.68E+00	5.68E+00	0.00E+00	2.50E-02	5.70E+00	3
111	17.266	23.993	5	5.73E+00	0.00E+00	5.73E+00	5.73E+00	0.00E+00	2.52E-02	5.76E+00	3
112	17.244	24.171	5	5.98E+00	0.00E+00	5.98E+00	5.98E+00	0.00E+00	2.63E-02	6.01E+00	4
113	17.262	24.275	5	6.53E+00	0.00E+00	6.53E+00	6.53E+00	0.00E+00	2.87E-02	6.56E+00	4
114	17.357	23.679	5	5.60E+00	0.00E+00	5.60E+00	5.60E+00	0.00E+00	2.46E-02	5.62E+00	3
115	17.323	24.549	5	7.78E+00	0.00E+00	7.78E+00	7.78E+00	0.00E+00	3.42E-02	7.81E+00	4
116	17.342	23.597	5	5.37E+00	0.00E+00	5.37E+00	5.37E+00	0.00E+00	2.36E-02	5.39E+00	3
117	17.349	23.785	5	5.81E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00	2.56E-02	5.84E+00	3
118	17.359	23.524	5	5.32E+00	0.00E+00	5.32E+00	5.32E+00	0.00E+00	2.34E-02	5.34E+00	3
119	17.263	24.484	5	7.10E+00	0.00E+00	7.10E+00	7.10E+00	0.00E+00	3.12E-02	7.13E+00	4
126	17.927	22.304	5	3.38E+00	0.00E+00	3.38E+00	3.38E+00	0.00E+00	1.49E-02	3.39E+00	3
127	18.068	22.411	5	3.53E+00	0.00E+00	3.53E+00	3.53E+00	0.00E+00	1.55E-02	3.55E+00	3
128	18.221	22.341	5	1.87E+00	0.00E+00	1.87E+00	1.87E+00	0.00E+00	8.23E-03	1.88E+00	2
129	17.95	22.413	5	3.69E+00	0.00E+00	3.69E+00	3.69E+00	0.00E+00	1.62E-02	3.71E+00	3
130	18.113	22.192	5	2.94E+00	0.00E+00	2.94E+00	2.94E+00	0.00E+00	1.29E-02	2.95E+00	2
131	18.022	22.275	5	3.37E+00	0.00E+00	3.37E+00	3.37E+00	0.00E+00	1.48E-02	3.38E+00	3
132	18.15	22.445	5	3.12E+00	0.00E+00	3.12E+00	3.12E+00	0.00E+00	1.37E-02	3.13E+00	3
134	18.225	27.128	5	3.35E+00	0.00E+00	3.35E+00	3.35E+00	0.00E+00	1.47E-02	3.36E+00	3
143	17.185	23.996	5	4.81E+00	0.00E+00	4.81E+00	4.81E+00	0.00E+00	2.12E-02	4.83E+00	3
158	17.797	26.587	5	9.92E+00	0.00E+00	9.92E+00	9.92E+00	0.00E+00	4.36E-02	9.96E+00	4
160	17.812	26.724	5	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
169	17.864	26.943	5	3.03E+01	0.00E+00	3.03E+01	3.03E+01	0.00E+00	1.33E-01	3.04E+01	6
172	17.953	26.234	5	2.51E+01	0.00E+00	2.51E+01	2.51E+01	0.00E+00	1.10E-01	2.52E+01	5
184	18.05	27.077	5	9.52E+01	0.00E+00	9.52E+01	9.52E+01	0.00E+00	4.19E-01	9.56E+01	8
187	17.885	22.726	5	3.94E+00	0.00E+00	3.94E+00	3.94E+00	0.00E+00	1.73E-02	3.96E+00	3
193	17.263	23.765	5	5.34E+00	0.00E+00	5.34E+00	5.34E+00	0.00E+00	2.35E-02	5.36E+00	3
195	17.552	24.359	5	5.71E+00	0.00E+00	5.71E+00	5.71E+00	0.00E+00	2.51E-02	5.74E+00	3
196	17.329	24.294	5	7.06E+00	0.00E+00	7.06E+00	7.06E+00	0.00E+00	3.11E-02	7.09E+00	4
197	17.35	24.467	5	7.80E+00	0.00E+00	7.80E+00	7.80E+00	0.00E+00	3.43E-02	7.83E+00	4
198	18.347	22.723	5	7.60E-02	0.00E+00	7.60E-02	7.60E-02	0.00E+00	3.34E-04	7.63E-02	1
199	17.47	26.332	5	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
200	17.542	26.309	5	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
203	17.342	26.573	5	2.37E+01	0.00E+00	2.37E+01	2.37E+01	0.00E+00	1.04E-01	2.38E+01	5
204	17.183	24.37	5	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
206	17.314	24.187	5	6.60E+00	0.00E+00	6.60E+00	6.60E+00	0.00E+00	2.90E-02	6.63E+00	4
207	17.355	23.946	5	6.37E+00	0.00E+00	6.37E+00	6.37E+00	0.00E+00	2.80E-02	6.40E+00	4
208	17.275	23.609	5	4.92E+00	0.00E+00	4.92E+00	4.92E+00	0.00E+00	2.16E-02	4.94E+00	3
209	17.266	24.069	5	5.92E+00	0.00E+00	5.92E+00	5.92E+00	0.00E+00	2.60E-02	5.95E+00	3
210	17.248	24.378	5	6.75E+00	0.00E+00	6.75E+00	6.75E+00	0.00E+00	2.97E-02	6.78E+00	4
211	17.359	24.366	5	7.46E+00	0.00E+00	7.46E+00	7.46E+00	0.00E+00	3.28E-02	7.49E+00	4
212	17.355	23.859	5	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.66E-02	6.08E+00	4
213	17.275	23.713	5	5.25E+00	0.00E+00	5.25E+00	5.25E+00	0.00E+00	2.31E-02	5.27E+00	3
217	17.997	22.157	5	3.16E+00	0.00E+00	3.16E+00	3.16E+00	0.00E+00	1.39E-02	3.17E+00	3
218	18.129	22.348	5	3.07E+00	0.00E+00	3.07E+00	3.07E+00	0.00E+00	1.35E-02	3.08E+00	3
235	17.54	26.653	5	1.39E+01	0.00E+00	1.39E+01	1.39E+01	0.00E+00	6.12E-02	1.40E+01	4
240	17.624	26.382	5	6.67E+00	0.00E+00	6.67E+00	6.67E+00	0.00E+00	2.93E-02	6.70E+00	4
241	17.803	26.836	5	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
242	17.453	26.585	5	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.33E-02	2.13E+01	5

Table F3
GB Exposure Estimates
Support Brigade

243	18.226	22.183	5	1.46E+00	0.00E+00	1.46E+00	1.46E+00	0.00E+00	6.42E-03	1.47E+00	2
244	17.886	26.503	5	2.29E+01	0.00E+00	2.29E+01	2.29E+01	0.00E+00	1.01E-01	2.30E+01	5
245	17.342	26.693	5	2.83E+01	0.00E+00	2.83E+01	2.83E+01	0.00E+00	1.25E-01	2.84E+01	5
246	17.56	26.496	5	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
247	17.618	26.228	5	7.34E+00	0.00E+00	7.34E+00	7.34E+00	0.00E+00	3.23E-02	7.37E+00	4
248	17.528	26.754	5	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
249	17.733	26.756	5	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.62E-02	3.70E+00	3
252	18.082	22.652	5	4.01E+00	0.00E+00	4.01E+00	4.01E+00	0.00E+00	1.76E-02	4.03E+00	3
253	17.471	24.264	5	6.65E+00	0.00E+00	6.65E+00	6.65E+00	0.00E+00	2.93E-02	6.68E+00	4
254	17.479	23.766	5	5.42E+00	0.00E+00	5.42E+00	5.42E+00	0.00E+00	2.38E-02	5.44E+00	3
255	18.303	23.109	5	1.83E+00	0.00E+00	1.83E+00	1.83E+00	0.00E+00	8.05E-03	1.84E+00	2
256	17.694	23.745	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
257	17.825	23.345	5	4.44E+00	0.00E+00	4.44E+00	4.44E+00	0.00E+00	1.95E-02	4.46E+00	3
258	17.872	23.363	5	5.09E+00	0.00E+00	5.09E+00	5.09E+00	0.00E+00	2.24E-02	5.11E+00	3
259	17.464	24.139	5	6.36E+00	0.00E+00	6.36E+00	6.36E+00	0.00E+00	2.80E-02	6.39E+00	4
260	17.671	24.255	5	6.18E+00	0.00E+00	6.18E+00	6.18E+00	0.00E+00	2.72E-02	6.21E+00	4
261	17.537	24.105	5	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
262	17.535	24.181	5	5.74E+00	0.00E+00	5.74E+00	5.74E+00	0.00E+00	2.53E-02	5.77E+00	3
263	18.375	23.041	5	5.99E-02	0.00E+00	5.99E-02	5.99E-02	0.00E+00	2.64E-04	6.02E-02	1
264	17.946	23.354	5	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
265	18.322	23.234	5	1.44E+00	0.00E+00	1.44E+00	1.44E+00	0.00E+00	6.34E-03	1.45E+00	2
266	17.871	23.446	5	5.26E+00	0.00E+00	5.26E+00	5.26E+00	0.00E+00	2.31E-02	5.28E+00	3
272	17.654	24.088	5	5.74E+00	0.00E+00	5.74E+00	5.74E+00	0.00E+00	2.53E-02	5.77E+00	3
273	18.388	23.221	5	1.56E-01	0.00E+00	1.56E-01	1.56E-01	0.00E+00	6.86E-04	1.57E-01	1
274	17.554	23.728	5	4.37E+00	0.00E+00	4.37E+00	4.37E+00	0.00E+00	1.92E-02	4.39E+00	3
275	17.659	23.893	5	5.10E+00	0.00E+00	5.10E+00	5.10E+00	0.00E+00	2.24E-02	5.12E+00	3
276	17.445	23.969	5	6.30E+00	0.00E+00	6.30E+00	6.30E+00	0.00E+00	2.77E-02	6.33E+00	4
277	17.554	23.921	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
278	17.752	24.26	5	5.98E+00	0.00E+00	5.98E+00	5.98E+00	0.00E+00	2.63E-02	6.01E+00	4
280	17.642	24.022	5	5.31E+00	0.00E+00	5.31E+00	5.31E+00	0.00E+00	2.34E-02	5.33E+00	3
281	17.58	24.093	5	4.89E+00	0.00E+00	4.89E+00	4.89E+00	0.00E+00	2.15E-02	4.91E+00	3
283	17.536	23.658	5	4.57E+00	0.00E+00	4.57E+00	4.57E+00	0.00E+00	2.01E-02	4.59E+00	3
284	17.455	23.844	5	5.81E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00	2.56E-02	5.84E+00	3
285	18.364	23.146	5	3.07E-01	0.00E+00	3.07E-01	3.07E-01	0.00E+00	1.35E-03	3.08E-01	2
286	17.668	23.823	5	4.92E+00	0.00E+00	4.92E+00	4.92E+00	0.00E+00	2.16E-02	4.94E+00	3
287	17.953	23.437	5	5.81E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00	2.56E-02	5.84E+00	3
288	17.572	23.825	5	4.28E+00	0.00E+00	4.28E+00	4.28E+00	0.00E+00	1.88E-02	4.30E+00	3
289	17.538	23.994	5	5.11E+00	0.00E+00	5.11E+00	5.11E+00	0.00E+00	2.25E-02	5.13E+00	3

Case 2a: Zero to One Minutes 2 rounds at aimpoint (10.60, 24.40)

292	10.584	23.765	1	0.00E+00	0.00E+00	0.00E+00	5.37E+01	0.00E+00	2.36E-01	2.36E-01	1
294	10.749	23.252	4	0.00E+00	0.00E+00	0.00E+00	3.00E-03	0.00E+00	1.32E-05	1.32E-05	1
337	11.004	23.167	5	0.00E+00	0.00E+00	0.00E+00	6.94E+01	0.00E+00	3.05E-01	3.05E-01	2
343	10.312	23.833	5	0.00E+00	0.00E+00	0.00E+00	3.47E+00	0.00E+00	1.53E-02	1.53E-02	1
344	10.44	23.445	5	0.00E+00	0.00E+00	0.00E+00	9.61E+01	0.00E+00	4.23E-01	4.23E-01	2
351	10.506	24.262	5	0.00E+00	0.00E+00	0.00E+00	8.50E+02	0.00E+00	3.74E+00	3.74E+00	3
353	11.083	22.905	5	0.00E+00	0.00E+00	0.00E+00	5.25E+01	0.00E+00	2.31E-01	2.31E-01	1
437	11.141	24.101	5	2.79E+01	0.00E+00	2.79E+01	1.40E+03	0.00E+00	6.16E+00	3.41E+01	6
438	10.477	23.225	5	0.00E+00	0.00E+00	0.00E+00	1.05E+01	0.00E+00	4.62E-02	4.62E-02	1
442	11.211	23.859	5	0.00E+00	0.00E+00	0.00E+00	2.50E-01	0.00E+00	1.10E-03	1.10E-03	1

Sarin (GB) 500kg TBM
Heavy Attack
Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops				4 rounds at aimpoint (17.70, 29.00)							
1	18.436	22.418	1	4.80E+00	0.00E+00	4.80E+00	4.80E+00	0.00E+00	2.11E-02	4.82E+00	3
3	17.181	23.524	2	1.53E+00	0.00E+00	1.53E+00	1.53E+00	0.00E+00	6.73E-03	1.54E+00	2
4	18.493	25.22	3	6.11E+00	0.00E+00	6.11E+00	6.11E+00	0.00E+00	2.69E-02	6.14E+00	4
8	17.462	26.876	5	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
9	17.366	26.775	5	7.60E+00	0.00E+00	7.60E+00	7.60E+00	0.00E+00	3.34E-02	7.63E+00	4
10	18.147	27.56	5	2.06E+02	0.00E+00	2.06E+02	2.06E+02	0.00E+00	9.06E-01	2.07E+02	8
11	17.742	26.629	5	1.66E+01	0.00E+00	1.66E+01	1.66E+01	0.00E+00	7.30E-02	1.67E+01	5

Table F3
GB Exposure Estimates
Support Brigade

12	18.13	27.247	5	1.43E+02	0.00E+00	1.43E+02	1.43E+02	0.00E+00	6.29E-01	1.44E+02	8
13	17.46	26.751	5	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
18	18.42	27.447	5	3.75E+00	0.00E+00	3.75E+00	3.75E+00	0.00E+00	1.65E-02	3.77E+00	3
19	18.212	27.476	5	1.54E+02	0.00E+00	1.54E+02	1.54E+02	0.00E+00	6.78E-01	1.55E+02	8
21	18.222	27.296	5	1.15E+02	0.00E+00	1.15E+02	1.15E+02	0.00E+00	5.06E-01	1.16E+02	8
23	18.087	27.398	5	1.72E+02	0.00E+00	1.72E+02	1.72E+02	0.00E+00	7.57E-01	1.73E+02	8
26	18.329	27.823	5	3.16E+01	0.00E+00	3.16E+01	3.16E+01	0.00E+00	1.39E-01	3.17E+01	6
29	18.374	27.844	5	5.23E+00	0.00E+00	5.23E+00	5.23E+00	0.00E+00	2.30E-02	5.25E+00	3
30	18.405	27.22	5	7.80E+00	0.00E+00	7.80E+00	7.80E+00	0.00E+00	3.43E-02	7.83E+00	4
31	18.118	27.716	5	2.43E+02	0.00E+00	2.43E+02	2.43E+02	0.00E+00	1.07E+00	2.44E+02	8
33	18.081	27.914	5	2.73E+02	0.00E+00	2.73E+02	2.73E+02	0.00E+00	1.20E+00	2.74E+02	8
35	18.597	25.229	5	2.16E+00	0.00E+00	2.16E+00	2.16E+00	0.00E+00	9.50E-03	2.17E+00	2
37	18.503	25.254	5	5.65E+00	0.00E+00	5.65E+00	5.65E+00	0.00E+00	2.49E-02	5.67E+00	3
39	18.591	24.662	5	2.81E+00	0.00E+00	2.81E+00	2.81E+00	0.00E+00	1.24E-02	2.82E+00	2
40	18.651	25.229	5	8.95E-01	0.00E+00	8.95E-01	8.95E-01	0.00E+00	3.94E-03	8.99E-01	2
47	17.923	22.204	5	8.99E+00	0.00E+00	8.99E+00	8.99E+00	0.00E+00	3.96E-02	9.03E+00	4
48	17.187	23.651	5	1.64E+00	0.00E+00	1.64E+00	1.64E+00	0.00E+00	7.22E-03	1.65E+00	2
49	17.468	24.443	5	5.41E+00	0.00E+00	5.41E+00	5.41E+00	0.00E+00	2.38E-02	5.43E+00	3
50	17.487	24.398	5	5.76E+00	0.00E+00	5.76E+00	5.76E+00	0.00E+00	2.53E-02	5.79E+00	3
51	18.556	25.363	5	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.57E-02	3.58E+00	3
52	17.293	24.34	5	3.22E+00	0.00E+00	3.22E+00	3.22E+00	0.00E+00	1.42E-02	3.23E+00	3
53	17.202	24.669	5	2.23E+00	0.00E+00	2.23E+00	2.23E+00	0.00E+00	9.81E-03	2.24E+00	2
54	17.418	24.675	5	5.02E+00	0.00E+00	5.02E+00	5.02E+00	0.00E+00	2.21E-02	5.04E+00	3
55	17.339	24.697	5	4.06E+00	0.00E+00	4.06E+00	4.06E+00	0.00E+00	1.79E-02	4.08E+00	3
56	17.274	24.597	5	3.11E+00	0.00E+00	3.11E+00	3.11E+00	0.00E+00	1.37E-02	3.12E+00	3
57	17.347	24.131	5	3.55E+00	0.00E+00	3.55E+00	3.55E+00	0.00E+00	1.56E-02	3.57E+00	3
58	17.336	24.001	5	3.34E+00	0.00E+00	3.34E+00	3.34E+00	0.00E+00	1.47E-02	3.35E+00	3
59	17.205	23.842	5	1.91E+00	0.00E+00	1.91E+00	1.91E+00	0.00E+00	8.40E-03	1.92E+00	2
60	17.421	24.329	5	4.55E+00	0.00E+00	4.55E+00	4.55E+00	0.00E+00	2.00E-02	4.57E+00	3
61	17.701	26.488	5	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
62	17.464	26.662	5	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
64	18.63	24.478	5	1.81E+00	0.00E+00	1.81E+00	1.81E+00	0.00E+00	7.96E-03	1.82E+00	2
66	18.725	24.47	5	2.23E-01	0.00E+00	2.23E-01	2.23E-01	0.00E+00	9.81E-04	2.24E-01	1
67	18.548	24.46	5	3.92E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00	1.72E-02	3.94E+00	3
68	17.659	26.754	5	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
69	17.555	26.861	5	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.06E-01	2.42E+01	5
70	18.282	22.39	5	7.92E+00	0.00E+00	7.92E+00	7.92E+00	0.00E+00	3.48E-02	7.95E+00	4
71	17.598	26.569	5	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
72	17.445	26.254	5	9.56E+00	0.00E+00	9.56E+00	9.56E+00	0.00E+00	4.21E-02	9.60E+00	4
73	17.815	26.257	5	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
74	17.693	26.866	5	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.18E-02	1.87E+01	5
75	17.678	26.639	5	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
76	17.409	26.724	5	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
77	17.784	26.491	5	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
78	17.875	26.374	5	3.49E+01	0.00E+00	3.49E+01	3.49E+01	0.00E+00	1.54E-01	3.51E+01	6
79	18.238	22.525	5	8.85E+00	0.00E+00	8.85E+00	8.85E+00	0.00E+00	3.89E-02	8.89E+00	4
80	18.435	22.682	5	5.29E+00	0.00E+00	5.29E+00	5.29E+00	0.00E+00	2.33E-02	5.31E+00	3
81	17.87	26.656	5	4.36E+01	0.00E+00	4.36E+01	4.36E+01	0.00E+00	1.92E-01	4.38E+01	6
82	17.332	26.414	5	5.69E+00	0.00E+00	5.69E+00	5.69E+00	0.00E+00	2.50E-02	5.72E+00	3
83	18.456	22.521	5	4.44E+00	0.00E+00	4.44E+00	4.44E+00	0.00E+00	1.95E-02	4.46E+00	3
84	17.736	26.324	5	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
85	17.884	22.396	5	9.35E+00	0.00E+00	9.35E+00	9.35E+00	0.00E+00	4.11E-02	9.39E+00	4
86	17.487	26.466	5	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
87	17.977	22.662	5	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
89	18.29	22.615	5	8.31E+00	0.00E+00	8.31E+00	8.31E+00	0.00E+00	3.66E-02	8.35E+00	4
90	18.43	22.295	5	4.64E+00	0.00E+00	4.64E+00	4.64E+00	0.00E+00	2.04E-02	4.66E+00	3
91	17.898	22.639	5	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
92	18.185	22.679	5	9.97E+00	0.00E+00	9.97E+00	9.97E+00	0.00E+00	4.39E-02	1.00E+01	4
93	17.348	26.251	5	6.20E+00	0.00E+00	6.20E+00	6.20E+00	0.00E+00	2.73E-02	6.23E+00	4
94	17.418	26.441	5	9.31E+00	0.00E+00	9.31E+00	9.31E+00	0.00E+00	4.10E-02	9.35E+00	4
95	17.937	26.836	5	7.40E+01	0.00E+00	7.40E+01	7.40E+01	0.00E+00	3.26E-01	7.43E+01	7
96	18.54	25.208	5	4.21E+00	0.00E+00	4.21E+00	4.21E+00	0.00E+00	1.85E-02	4.23E+00	3
97	18.546	25.327	5	3.96E+00	0.00E+00	3.96E+00	3.96E+00	0.00E+00	1.74E-02	3.98E+00	3
98	17.59	26.733	5	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5
99	17.775	26.941	5	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
100	17.232	23.912	5	2.20E+00	0.00E+00	2.20E+00	2.20E+00	0.00E+00	9.68E-03	2.21E+00	2
101	17.439	24.597	5	5.15E+00	0.00E+00	5.15E+00	5.15E+00	0.00E+00	2.27E-02	5.17E+00	3

Table F3
GB Exposure Estimates
Support Brigade

102	17.175	24.255	5	1.80E+00	0.00E+00	1.80E+00	1.80E+00	0.00E+00	7.92E-03	1.81E+00	2
103	17.359	24.059	5	3.60E+00	0.00E+00	3.60E+00	3.60E+00	0.00E+00	1.58E-02	3.62E+00	3
104	17.452	24.521	5	5.19E+00	0.00E+00	5.19E+00	5.19E+00	0.00E+00	2.28E-02	5.21E+00	3
105	17.223	23.804	5	2.04E+00	0.00E+00	2.04E+00	2.04E+00	0.00E+00	8.98E-03	2.05E+00	2
106	17.181	24.103	5	1.84E+00	0.00E+00	1.84E+00	1.84E+00	0.00E+00	8.10E-03	1.85E+00	2
107	17.369	24.259	5	3.91E+00	0.00E+00	3.91E+00	3.91E+00	0.00E+00	1.72E-02	3.93E+00	3
108	17.177	24.439	5	1.88E+00	0.00E+00	1.88E+00	1.88E+00	0.00E+00	8.27E-03	1.89E+00	2
109	17.196	24.503	5	2.15E+00	0.00E+00	2.15E+00	2.15E+00	0.00E+00	9.46E-03	2.16E+00	2
110	17.283	23.842	5	2.74E+00	0.00E+00	2.74E+00	2.74E+00	0.00E+00	1.21E-02	2.75E+00	2
111	17.266	23.993	5	2.61E+00	0.00E+00	2.61E+00	2.61E+00	0.00E+00	1.15E-02	2.62E+00	2
112	17.244	24.171	5	2.44E+00	0.00E+00	2.44E+00	2.44E+00	0.00E+00	1.07E-02	2.45E+00	2
113	17.262	24.275	5	2.72E+00	0.00E+00	2.72E+00	2.72E+00	0.00E+00	1.20E-02	2.73E+00	2
114	17.357	23.679	5	3.23E+00	0.00E+00	3.23E+00	3.23E+00	0.00E+00	1.42E-02	3.24E+00	3
115	17.323	24.549	5	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.64E-02	3.75E+00	3
116	17.342	23.597	5	3.05E+00	0.00E+00	3.05E+00	3.05E+00	0.00E+00	1.34E-02	3.06E+00	3
117	17.349	23.785	5	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.43E-02	3.26E+00	3
118	17.359	23.524	5	3.12E+00	0.00E+00	3.12E+00	3.12E+00	0.00E+00	1.37E-02	3.13E+00	3
119	17.263	24.484	5	2.86E+00	0.00E+00	2.86E+00	2.86E+00	0.00E+00	1.26E-02	2.87E+00	2
120	18.546	23.924	5	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.64E-02	3.75E+00	3
121	18.621	23.802	5	1.89E+00	0.00E+00	1.89E+00	1.89E+00	0.00E+00	8.32E-03	1.90E+00	2
122	18.534	24.025	5	4.08E+00	0.00E+00	4.08E+00	4.08E+00	0.00E+00	1.80E-02	4.10E+00	3
123	18.669	23.711	5	8.36E-01	0.00E+00	8.36E-01	8.36E-01	0.00E+00	3.68E-03	8.40E-01	2
124	18.708	24.08	5	3.76E-01	0.00E+00	3.76E-01	3.76E-01	0.00E+00	1.65E-03	3.78E-01	2
125	18.731	23.867	5	1.68E-01	0.00E+00	1.68E-01	1.68E-01	0.00E+00	7.39E-04	1.69E-01	1
126	17.927	22.304	5	9.32E+00	0.00E+00	9.32E+00	9.32E+00	0.00E+00	4.10E-02	9.36E+00	4
127	18.068	22.411	5	9.51E+00	0.00E+00	9.51E+00	9.51E+00	0.00E+00	4.18E-02	9.55E+00	4
128	18.221	22.341	5	8.60E+00	0.00E+00	8.60E+00	8.60E+00	0.00E+00	3.78E-02	8.64E+00	4
129	17.95	22.413	5	9.70E+00	0.00E+00	9.70E+00	9.70E+00	0.00E+00	4.27E-02	9.74E+00	4
130	18.113	22.192	5	8.95E+00	0.00E+00	8.95E+00	8.95E+00	0.00E+00	3.94E-02	8.99E+00	4
131	18.022	22.275	5	9.20E+00	0.00E+00	9.20E+00	9.20E+00	0.00E+00	4.05E-02	9.24E+00	4
132	18.15	22.445	5	9.51E+00	0.00E+00	9.51E+00	9.51E+00	0.00E+00	4.18E-02	9.55E+00	4
133	18.565	23.665	5	3.11E+00	0.00E+00	3.11E+00	3.11E+00	0.00E+00	1.37E-02	3.12E+00	3
134	18.225	27.128	5	9.50E+01	0.00E+00	9.50E+01	9.50E+01	0.00E+00	4.18E-01	9.54E+01	8
143	17.185	23.996	5	1.85E+00	0.00E+00	1.85E+00	1.85E+00	0.00E+00	8.14E-03	1.86E+00	2
151	18.507	25.357	5	5.46E+00	0.00E+00	5.46E+00	5.46E+00	0.00E+00	2.40E-02	5.48E+00	3
153	18.624	25.296	5	1.42E+00	0.00E+00	1.42E+00	1.42E+00	0.00E+00	6.25E-03	1.43E+00	2
158	17.797	26.587	5	2.26E+01	0.00E+00	2.26E+01	2.26E+01	0.00E+00	9.94E-02	2.27E+01	5
160	17.812	26.724	5	2.74E+01	0.00E+00	2.74E+01	2.74E+01	0.00E+00	1.21E-01	2.75E+01	5
169	17.864	26.943	5	4.66E+01	0.00E+00	4.66E+01	4.66E+01	0.00E+00	2.05E-01	4.68E+01	6
172	17.953	26.234	5	4.21E+01	0.00E+00	4.21E+01	4.21E+01	0.00E+00	1.85E-01	4.23E+01	6
174	18.25	27.882	5	1.83E+02	0.00E+00	1.83E+02	1.83E+02	0.00E+00	8.05E-01	1.84E+02	8
178	18.548	27.223	5	3.31E-02	0.00E+00	3.31E-02	3.31E-02	0.00E+00	1.46E-04	3.32E-02	1
180	18.355	27.121	5	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
181	18.384	27.661	5	7.31E+00	0.00E+00	7.31E+00	7.31E+00	0.00E+00	3.22E-02	7.34E+00	4
184	18.05	27.077	5	1.29E+02	0.00E+00	1.29E+02	1.29E+02	0.00E+00	5.68E-01	1.30E+02	8
186	18.456	25.249	5	7.87E+00	0.00E+00	7.87E+00	7.87E+00	0.00E+00	3.46E-02	7.90E+00	4
187	17.885	22.726	5	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
189	18.711	24.196	5	3.50E-01	0.00E+00	3.50E-01	3.50E-01	0.00E+00	1.54E-03	3.52E-01	2
190	18.65	24.342	5	1.25E+00	0.00E+00	1.25E+00	1.25E+00	0.00E+00	5.50E-03	1.26E+00	2
191	18.361	22.159	5	5.98E+00	0.00E+00	5.98E+00	5.98E+00	0.00E+00	2.63E-02	6.01E+00	4
192	18.459	25.309	5	7.68E+00	0.00E+00	7.68E+00	7.68E+00	0.00E+00	3.38E-02	7.71E+00	4
193	17.263	23.765	5	2.44E+00	0.00E+00	2.44E+00	2.44E+00	0.00E+00	1.07E-02	2.45E+00	2
195	17.552	24.359	5	6.94E+00	0.00E+00	6.94E+00	6.94E+00	0.00E+00	3.05E-02	6.97E+00	4
196	17.329	24.294	5	3.55E+00	0.00E+00	3.55E+00	3.55E+00	0.00E+00	1.56E-02	3.57E+00	3
197	17.35	24.467	5	3.92E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00	1.72E-02	3.94E+00	3
198	18.347	22.723	5	7.63E+00	0.00E+00	7.63E+00	7.63E+00	0.00E+00	3.36E-02	7.66E+00	4
199	17.47	26.332	5	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
200	17.542	26.309	5	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
201	18.562	25.274	5	3.36E+00	0.00E+00	3.36E+00	3.36E+00	0.00E+00	1.48E-02	3.37E+00	3
202	18.502	25.317	5	5.67E+00	0.00E+00	5.67E+00	5.67E+00	0.00E+00	2.49E-02	5.69E+00	3
203	17.342	26.573	5	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.74E-02	6.26E+00	4
204	17.183	24.37	5	1.94E+00	0.00E+00	1.94E+00	1.94E+00	0.00E+00	8.54E-03	1.95E+00	2
205	18.626	24.203	5	1.92E+00	0.00E+00	1.92E+00	1.92E+00	0.00E+00	8.45E-03	1.93E+00	2
206	17.314	24.187	5	3.33E+00	0.00E+00	3.33E+00	3.33E+00	0.00E+00	1.47E-02	3.34E+00	3
207	17.355	23.946	5	3.45E+00	0.00E+00	3.45E+00	3.45E+00	0.00E+00	1.52E-02	3.47E+00	3
208	17.275	23.609	5	2.50E+00	0.00E+00	2.50E+00	2.50E+00	0.00E+00	1.10E-02	2.51E+00	2
209	17.266	24.069	5	2.65E+00	0.00E+00	2.65E+00	2.65E+00	0.00E+00	1.17E-02	2.66E+00	2

Table F3
GB Exposure Estimates
Support Brigade

210	17.248	24.378	5	2.58E+00	0.00E+00	2.58E+00	2.58E+00	0.00E+00	1.14E-02	2.59E+00	2
211	17.359	24.366	5	3.92E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00	1.72E-02	3.94E+00	3
212	17.355	23.859	5	3.37E+00	0.00E+00	3.37E+00	3.37E+00	0.00E+00	1.48E-02	3.38E+00	3
213	17.275	23.713	5	2.56E+00	0.00E+00	2.56E+00	2.56E+00	0.00E+00	1.13E-02	2.57E+00	2
214	18.619	23.957	5	2.05E+00	0.00E+00	2.05E+00	2.05E+00	0.00E+00	9.02E-03	2.06E+00	2
215	18.642	24.09	5	1.45E+00	0.00E+00	1.45E+00	1.45E+00	0.00E+00	6.38E-03	1.46E+00	2
216	18.7	23.951	5	4.45E-01	0.00E+00	4.45E-01	4.45E-01	0.00E+00	1.96E-03	4.47E-01	2
217	17.997	22.157	5	8.80E+00	0.00E+00	8.80E+00	8.80E+00	0.00E+00	3.87E-02	8.84E+00	4
218	18.129	22.348	5	9.30E+00	0.00E+00	9.30E+00	9.30E+00	0.00E+00	4.09E-02	9.34E+00	4
219	18.331	22.261	5	6.85E+00	0.00E+00	6.85E+00	6.85E+00	0.00E+00	3.01E-02	6.88E+00	4
220	18.528	23.774	5	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
225	18.26	27.647	5	1.24E+02	0.00E+00	1.24E+02	1.24E+02	0.00E+00	5.46E-01	1.25E+02	8
229	18.608	25.375	5	1.58E+00	0.00E+00	1.58E+00	1.58E+00	0.00E+00	6.95E-03	1.59E+00	2
230	18.643	25.342	5	1.02E+00	0.00E+00	1.02E+00	1.02E+00	0.00E+00	4.49E-03	1.02E+00	2
235	17.54	26.653	5	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
238	18.533	24.214	5	4.24E+00	0.00E+00	4.24E+00	4.24E+00	0.00E+00	1.87E-02	4.26E+00	3
239	18.727	24.309	5	2.06E-01	0.00E+00	2.06E-01	2.06E-01	0.00E+00	9.06E-04	2.07E-01	1
240	17.624	26.382	5	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
241	17.803	26.836	5	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
242	17.453	26.585	5	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
243	18.226	22.183	5	8.19E+00	0.00E+00	8.19E+00	8.19E+00	0.00E+00	3.60E-02	8.23E+00	4
244	17.886	26.503	5	4.04E+01	0.00E+00	4.04E+01	4.04E+01	0.00E+00	1.78E-01	4.06E+01	6
245	17.342	26.693	5	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.74E-02	6.26E+00	4
246	17.56	26.496	5	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
247	17.618	26.228	5	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
248	17.528	26.754	5	2.08E+01	0.00E+00	2.08E+01	2.08E+01	0.00E+00	9.15E-02	2.09E+01	5
249	17.733	26.756	5	1.67E+01	0.00E+00	1.67E+01	1.67E+01	0.00E+00	7.35E-02	1.68E+01	5
250	18.375	22.578	5	6.65E+00	0.00E+00	6.65E+00	6.65E+00	0.00E+00	2.93E-02	6.68E+00	4
252	18.082	22.652	5	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
253	17.471	24.264	5	5.24E+00	0.00E+00	5.24E+00	5.24E+00	0.00E+00	2.31E-02	5.26E+00	3
254	17.479	23.766	5	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
255	18.303	23.109	5	9.46E+00	0.00E+00	9.46E+00	9.46E+00	0.00E+00	4.16E-02	9.50E+00	4
256	17.694	23.745	5	9.28E+00	0.00E+00	9.28E+00	9.28E+00	0.00E+00	4.08E-02	9.32E+00	4
257	17.825	23.345	5	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
258	17.872	23.363	5	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
259	17.464	24.139	5	4.91E+00	0.00E+00	4.91E+00	4.91E+00	0.00E+00	2.16E-02	4.93E+00	3
260	17.671	24.255	5	9.75E+00	0.00E+00	9.75E+00	9.75E+00	0.00E+00	4.29E-02	9.79E+00	4
261	17.537	24.105	5	6.26E+00	0.00E+00	6.26E+00	6.26E+00	0.00E+00	2.75E-02	6.29E+00	4
262	17.535	24.181	5	6.36E+00	0.00E+00	6.36E+00	6.36E+00	0.00E+00	2.80E-02	6.39E+00	4
263	18.375	23.041	5	7.58E+00	0.00E+00	7.58E+00	7.58E+00	0.00E+00	3.34E-02	7.61E+00	4
264	17.946	23.354	5	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
265	18.322	23.234	5	9.36E+00	0.00E+00	9.36E+00	9.36E+00	0.00E+00	4.12E-02	9.40E+00	4
266	17.871	23.446	5	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
267	18.457	23.056	5	5.40E+00	0.00E+00	5.40E+00	5.40E+00	0.00E+00	2.38E-02	5.42E+00	3
272	17.654	24.088	5	8.74E+00	0.00E+00	8.74E+00	8.74E+00	0.00E+00	3.85E-02	8.78E+00	4
273	18.388	23.221	5	7.59E+00	0.00E+00	7.59E+00	7.59E+00	0.00E+00	3.34E-02	7.62E+00	4
274	17.554	23.728	5	5.91E+00	0.00E+00	5.91E+00	5.91E+00	0.00E+00	2.60E-02	5.94E+00	3
275	17.659	23.893	5	8.56E+00	0.00E+00	8.56E+00	8.56E+00	0.00E+00	3.77E-02	8.60E+00	4
276	17.445	23.969	5	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
277	17.554	23.921	5	6.22E+00	0.00E+00	6.22E+00	6.22E+00	0.00E+00	2.74E-02	6.25E+00	4
278	17.752	24.26	5	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
279	18.479	23.337	5	4.96E+00	0.00E+00	4.96E+00	4.96E+00	0.00E+00	2.18E-02	4.98E+00	3
280	17.642	24.022	5	8.25E+00	0.00E+00	8.25E+00	8.25E+00	0.00E+00	3.63E-02	8.29E+00	4
281	17.58	24.093	5	6.96E+00	0.00E+00	6.96E+00	6.96E+00	0.00E+00	3.06E-02	6.99E+00	4
282	18.448	23.188	5	5.88E+00	0.00E+00	5.88E+00	5.88E+00	0.00E+00	2.59E-02	5.91E+00	3
283	17.536	23.658	5	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.44E-02	5.56E+00	3
284	17.455	23.844	5	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
285	18.364	23.146	5	8.11E+00	0.00E+00	8.11E+00	8.11E+00	0.00E+00	3.57E-02	8.15E+00	4
286	17.668	23.823	5	8.72E+00	0.00E+00	8.72E+00	8.72E+00	0.00E+00	3.84E-02	8.76E+00	4
287	17.953	23.437	5	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
288	17.572	23.825	5	6.31E+00	0.00E+00	6.31E+00	6.31E+00	0.00E+00	2.78E-02	6.34E+00	4
289	17.538	23.994	5	6.10E+00	0.00E+00	6.10E+00	6.10E+00	0.00E+00	2.68E-02	6.13E+00	4
Case 2: Protected 4 rounds at aimpoint (18.70, 25.10)											
35	18.597	25.229	5	1.18E+01	0.00E+00	1.18E+01	2.70E+02	0.00E+00	1.19E+00	1.30E+01	4
37	18.503	25.254	5	2.22E-01	0.00E+00	2.22E-01	4.61E+00	0.00E+00	2.03E-02	2.42E-01	1
39	18.591	24.662	5	0.00E+00	0.00E+00	0.00E+00	3.93E+02	0.00E+00	1.73E+00	1.73E+00	2
41	18.896	23.788	5	0.00E+00	0.00E+00	0.00E+00	1.00E+02	0.00E+00	4.40E-01	4.40E-01	2

Table F3
GB Exposure Estimates
Support Brigade

42	18.853	24.109	5	0.00E+00	0.00E+00	0.00E+00	4.53E+00	0.00E+00	1.99E-02	1.99E-02	1
43	18.892	24.476	5	0.00E+00	0.00E+00	0.00E+00	2.12E-01	0.00E+00	9.33E-04	9.33E-04	1
44	18.936	24.319	5	0.00E+00	0.00E+00	0.00E+00	5.78E+02	0.00E+00	2.54E+00	2.54E+00	2
46	18.921	24.089	5	0.00E+00	0.00E+00	0.00E+00	2.36E+02	0.00E+00	1.04E+00	1.04E+00	2
51	18.556	25.363	5	4.44E+00	0.00E+00	4.44E+00	4.44E+00	0.00E+00	1.95E-02	4.46E+00	3
63	18.818	24.344	5	0.00E+00	0.00E+00	0.00E+00	9.17E-02	0.00E+00	4.03E-04	4.03E-04	1
64	18.63	24.478	5	0.00E+00	0.00E+00	0.00E+00	1.65E+02	0.00E+00	7.26E-01	7.26E-01	2
65	18.806	24.225	5	0.00E+00	0.00E+00	0.00E+00	5.50E-01	0.00E+00	2.42E-03	2.42E-03	1
66	18.725	24.47	5	0.00E+00	0.00E+00	0.00E+00	9.61E+00	0.00E+00	4.23E-02	4.23E-02	1
67	18.548	24.46	5	0.00E+00	0.00E+00	0.00E+00	2.31E+02	0.00E+00	1.02E+00	1.02E+00	2
96	18.54	25.208	5	4.38E-01	0.00E+00	4.38E-01	1.17E+02	0.00E+00	5.15E-01	9.53E-01	2
97	18.546	25.327	5	4.65E+00	0.00E+00	4.65E+00	4.65E+00	0.00E+00	2.05E-02	4.67E+00	3
120	18.546	23.924	5	0.00E+00	0.00E+00	0.00E+00	7.75E+01	0.00E+00	3.41E-01	3.41E-01	2
121	18.621	23.802	5	0.00E+00	0.00E+00	0.00E+00	4.43E+01	0.00E+00	1.95E-01	1.95E-01	1
122	18.534	24.025	5	0.00E+00	0.00E+00	0.00E+00	8.98E+01	0.00E+00	3.95E-01	3.95E-01	2
123	18.669	23.711	5	0.00E+00	0.00E+00	0.00E+00	1.64E+01	0.00E+00	7.22E-02	7.22E-02	1
124	18.708	24.08	5	0.00E+00	0.00E+00	0.00E+00	3.01E+01	0.00E+00	1.32E-01	1.32E-01	1
125	18.731	23.867	5	0.00E+00	0.00E+00	0.00E+00	1.59E+01	0.00E+00	7.00E-02	7.00E-02	1
133	18.565	23.665	5	0.00E+00	0.00E+00	0.00E+00	1.72E+01	0.00E+00	7.57E-02	7.57E-02	1
151	18.507	25.357	5	4.29E-01	0.00E+00	4.29E-01	4.29E-01	0.00E+00	1.89E-03	4.31E-01	2
153	18.624	25.296	5	2.14E+01	0.00E+00	2.14E+01	2.92E+01	0.00E+00	1.28E-01	2.15E+01	5
189	18.711	24.196	5	0.00E+00	0.00E+00	0.00E+00	2.71E+01	0.00E+00	1.19E-01	1.19E-01	1
190	18.65	24.342	5	0.00E+00	0.00E+00	0.00E+00	1.03E+02	0.00E+00	4.53E-01	4.53E-01	2
201	18.562	25.274	5	1.15E+01	0.00E+00	1.15E+01	6.64E+01	0.00E+00	2.92E-01	1.18E+01	4
202	18.502	25.317	5	2.29E-01	0.00E+00	2.29E-01	2.29E-01	0.00E+00	1.01E-03	2.30E-01	1
205	18.626	24.203	5	0.00E+00	0.00E+00	0.00E+00	1.14E+02	0.00E+00	5.02E-01	5.02E-01	2
214	18.619	23.957	5	0.00E+00	0.00E+00	0.00E+00	7.83E+01	0.00E+00	3.45E-01	3.45E-01	2
215	18.642	24.09	5	0.00E+00	0.00E+00	0.00E+00	8.35E+01	0.00E+00	3.67E-01	3.67E-01	2
216	18.7	23.951	5	0.00E+00	0.00E+00	0.00E+00	3.19E+01	0.00E+00	1.40E-01	1.40E-01	1
220	18.528	23.774	5	0.00E+00	0.00E+00	0.00E+00	3.70E+01	0.00E+00	1.63E-01	1.63E-01	1
229	18.608	25.375	5	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
230	18.643	25.342	5	3.63E+00	0.00E+00	3.63E+00	3.63E+00	0.00E+00	1.60E-02	3.65E+00	3
238	18.533	24.214	5	0.00E+00	0.00E+00	0.00E+00	1.24E+02	0.00E+00	5.46E-01	5.46E-01	2
239	18.727	24.309	5	0.00E+00	0.00E+00	0.00E+00	1.53E+01	0.00E+00	6.73E-02	6.73E-02	1
268	18.912	23.198	5	0.00E+00	0.00E+00	0.00E+00	3.67E+01	0.00E+00	1.61E-01	1.61E-01	1
269	18.847	23.066	5	0.00E+00	0.00E+00	0.00E+00	5.26E+00	0.00E+00	2.31E-02	2.31E-02	1
270	18.931	23.07	5	0.00E+00	0.00E+00	0.00E+00	1.35E+01	0.00E+00	5.94E-02	5.94E-02	1
271	18.815	23.167	5	0.00E+00	0.00E+00	0.00E+00	8.01E+00	0.00E+00	3.52E-02	3.52E-02	1
279	18.479	23.337	5	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	5.19E-05	5.19E-05	1

Table F4
VX Exposure Estimates
Support Brigade

VX 152mm Artillery
Light Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (17.30, 24.95)							
3	17.181	23.524	2	1.90E-02	6.17E-02	2.66E-02	1.90E-02	6.17E-02	4.59E-01	4.85E-01	2
48	17.187	23.651	5	6.22E-02	5.06E-01	8.71E-02	6.22E-02	5.06E-01	3.63E+00	3.72E+00	3
49	17.468	24.443	5	7.45E-02	1.19E+00	1.04E-01	7.45E-02	1.19E+00	8.43E+00	8.54E+00	4
50	17.487	24.398	5	1.40E-02	4.73E-01	1.96E-02	1.40E-02	4.73E-01	3.33E+00	3.35E+00	3
52	17.293	24.340	5	3.68E+00	5.00E+01	5.15E+00	3.68E+00	5.00E+01	3.55E+02	3.60E+02	8
53	17.202	24.669	5	7.56E-02	1.54E+00	1.06E-01	7.56E-02	1.54E+00	1.09E+01	1.10E+01	4
54	17.418	24.675	5	6.33E-01	1.43E+01	8.86E-01	6.33E-01	1.43E+01	1.01E+02	1.02E+02	8
55	17.339	24.697	5	3.09E+01	6.93E+02	4.33E+01	3.09E+01	6.93E+02	4.89E+03	4.94E+03	8
56	17.274	24.597	5	1.23E+01	2.09E+02	1.72E+01	1.23E+01	2.09E+02	1.48E+03	1.50E+03	8
57	17.347	24.131	5	1.52E+00	1.80E+01	2.13E+00	1.52E+00	1.80E+01	1.28E+02	1.30E+02	8
58	17.336	24.001	5	9.34E-01	1.02E+01	1.31E+00	9.34E-01	1.02E+01	7.27E+01	7.40E+01	7
59	17.205	23.842	5	1.55E-01	1.62E+00	2.17E-01	1.55E-01	1.62E+00	1.16E+01	1.18E+01	4
60	17.421	24.329	5	1.03E+00	1.43E+01	1.44E+00	1.03E+00	1.43E+01	1.02E+02	1.03E+02	8
100	17.232	23.912	5	3.20E-01	3.35E+00	4.48E-01	3.20E-01	3.35E+00	2.39E+01	2.43E+01	5
101	17.439	24.597	5	1.05E-01	2.06E+00	1.47E-01	1.05E-01	2.06E+00	1.46E+01	1.47E+01	4
102	17.175	24.255	5	1.65E-01	2.13E+00	2.31E-01	1.65E-01	2.13E+00	1.51E+01	1.54E+01	5
103	17.359	24.059	5	1.09E+00	1.22E+01	1.53E+00	1.09E+00	1.22E+01	8.69E+01	8.85E+01	8
104	17.452	24.521	5	9.88E-02	1.85E+00	1.38E-01	9.88E-02	1.85E+00	1.31E+01	1.32E+01	4
105	17.223	23.804	5	2.02E-01	2.03E+00	2.83E-01	2.02E-01	2.03E+00	1.45E+01	1.48E+01	4
106	17.181	24.103	5	1.87E-01	2.24E+00	2.62E-01	1.87E-01	2.24E+00	1.59E+01	1.62E+01	5
107	17.369	24.259	5	2.16E+00	2.79E+01	3.02E+00	2.16E+00	2.79E+01	1.98E+02	2.01E+02	8
108	17.177	24.439	5	8.86E-02	1.37E+00	1.24E-01	8.86E-02	1.37E+00	9.71E+00	9.84E+00	4
109	17.196	24.503	5	1.91E-01	3.01E+00	2.67E-01	1.91E-01	3.01E+00	2.13E+01	2.16E+01	5
110	17.283	23.842	5	4.58E-01	4.62E+00	6.41E-01	4.58E-01	4.62E+00	3.30E+01	3.36E+01	6
111	17.266	23.993	5	6.82E-01	7.37E+00	9.55E-01	6.82E-01	7.37E+00	5.25E+01	5.35E+01	7
112	17.244	24.171	5	9.73E-01	1.18E+01	1.36E+00	9.73E-01	1.18E+01	8.40E+01	8.53E+01	8
113	17.262	24.275	5	1.83E+00	2.41E+01	2.56E+00	1.83E+00	2.41E+01	1.71E+02	1.74E+02	8
114	17.357	23.679	5	3.19E-01	2.71E+00	4.47E-01	3.19E-01	2.71E+00	1.94E+01	1.99E+01	5
115	17.323	24.549	5	1.25E+01	2.02E+02	1.75E+01	1.25E+01	2.02E+02	1.43E+03	1.45E+03	8
116	17.342	23.597	5	2.45E-01	1.67E+00	3.43E-01	2.45E-01	1.67E+00	1.20E+01	1.24E+01	4
117	17.349	23.785	5	4.27E-01	4.17E+00	5.98E-01	4.27E-01	4.17E+00	2.98E+01	3.04E+01	6
118	17.359	23.524	5	1.76E-01	7.25E-01	2.46E-01	1.76E-01	7.25E-01	5.32E+00	5.57E+00	3
119	17.263	24.484	5	4.58E+00	6.99E+01	6.41E+00	4.58E+00	6.99E+01	4.96E+02	5.02E+02	8
143	17.185	23.996	5	1.56E-01	1.74E+00	2.18E-01	1.56E-01	1.74E+00	1.24E+01	1.26E+01	4
193	17.263	23.765	5	3.17E-01	3.02E+00	4.44E-01	3.17E-01	3.02E+00	2.16E+01	2.20E+01	5
196	17.329	24.294	5	3.27E+00	4.26E+01	4.58E+00	3.27E+00	4.26E+01	3.03E+02	3.07E+02	8
197	17.350	24.467	5	7.68E+00	1.11E+02	1.08E+01	7.68E+00	1.11E+02	7.88E+02	7.99E+02	8
204	17.183	24.370	5	1.67E-01	2.37E+00	2.34E-01	1.67E-01	2.37E+00	1.68E+01	1.71E+01	5
206	17.314	24.187	5	2.00E+00	2.44E+01	2.80E+00	2.00E+00	2.44E+01	1.74E+02	1.76E+02	8
207	17.355	23.946	5	7.00E-01	7.35E+00	9.80E-01	7.00E-01	7.35E+00	5.24E+01	5.34E+01	7
208	17.275	23.609	5	2.21E-01	1.56E+00	3.09E-01	2.21E-01	1.56E+00	1.12E+01	1.15E+01	4
209	17.266	24.069	5	9.19E-01	1.04E+01	1.29E+00	9.19E-01	1.04E+01	7.41E+01	7.54E+01	8
210	17.248	24.378	5	1.90E+00	2.75E+01	2.66E+00	1.90E+00	2.75E+01	1.95E+02	1.98E+02	8
211	17.359	24.366	5	4.01E+00	5.53E+01	5.61E+00	4.01E+00	5.53E+01	3.93E+02	3.98E+02	8
212	17.355	23.859	5	5.21E-01	5.23E+00	7.29E-01	5.21E-01	5.23E+00	3.73E+01	3.81E+01	6
213	17.275	23.713	5	3.14E-01	2.80E+00	4.40E-01	3.14E-01	2.80E+00	2.00E+01	2.05E+01	5
253	17.471	24.264	5	1.85E-01	2.48E+00	2.59E-01	1.85E-01	2.48E+00	1.76E+01	1.79E+01	5
254	17.479	23.766	5	4.51E-02	5.50E-01	6.31E-02	4.51E-02	5.50E-01	3.91E+00	3.98E+00	3
259	17.464	24.139	5	2.31E-01	2.86E+00	3.23E-01	2.31E-01	2.86E+00	2.03E+01	2.07E+01	5
261	17.537	24.105	5	3.61E-03	1.46E-01	5.05E-03	3.61E-03	1.46E-01	1.03E+00	1.03E+00	2
262	17.535	24.181	5	2.64E-03	1.41E-01	3.70E-03	2.64E-03	1.41E-01	9.91E-01	9.94E-01	2
276	17.445	23.969	5	2.27E-01	2.50E+00	3.18E-01	2.27E-01	2.50E+00	1.78E+01	1.81E+01	5
277	17.554	23.921	5	4.42E-07	0.00E+00	6.19E-07	4.42E-07	0.00E+00	6.19E-07	1.24E-06	1
283	17.536	23.658	5	2.25E-04	0.00E+00	3.15E-04	2.25E-04	0.00E+00	3.15E-04	6.30E-04	1
284	17.455	23.844	5	1.19E-01	1.28E+00	1.67E-01	1.19E-01	1.28E+00	9.13E+00	9.29E+00	4
289	17.538	23.994	5	1.86E-03	0.00E+00	2.60E-03	1.86E-03	0.00E+00	2.60E-03	5.21E-03	1
Case 2: Protected				18 rounds at aimpoint (17.30, 24.95)							
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-02	4.01E-01	4.01E-01	2
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-01	3.30E+00	3.30E+00	3

Table F4
VX Exposure Estimates
Support Brigade

49	17.468	24.443	5	0.00E+00	3.91E-01	0.00E+00	2.66E-05	1.13E+00	7.91E+00	7.91E+00	4
50	17.487	24.398	5	0.00E+00	1.49E-01	0.00E+00	4.54E-09	4.50E-01	3.15E+00	3.15E+00	3
52	17.293	24.340	5	2.33E-03	1.48E+01	3.26E-03	1.89E-02	4.75E+01	3.33E+02	3.33E+02	8
53	17.202	24.669	5	0.00E+00	5.13E-01	0.00E+00	8.73E-05	1.47E+00	1.03E+01	1.03E+01	4
54	17.418	24.675	5	1.69E-04	4.77E+00	2.37E-04	2.82E-03	1.36E+01	9.52E+01	9.52E+01	8
55	17.339	24.697	5	2.31E-01	2.31E+02	3.23E-01	8.88E-01	6.61E+02	4.63E+03	4.63E+03	8
56	17.274	24.597	5	1.91E-01	6.96E+01	2.67E-01	5.98E-01	1.99E+02	1.39E+03	1.39E+03	8
57	17.347	24.131	5	0.00E+00	1.64E-01	0.00E+00	3.99E-03	1.68E+01	1.18E+02	1.18E+02	8
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	2.13E-03	9.45E+00	6.62E+01	6.62E+01	7
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	8.09E-08	1.51E+00	1.06E+01	1.06E+01	4
60	17.421	24.329	5	0.00E+00	4.09E+00	0.00E+00	2.72E-03	1.36E+01	9.52E+01	9.52E+01	8
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	4.54E-04	3.11E+00	2.18E+01	2.18E+01	5
101	17.439	24.597	5	0.00E+00	6.86E-01	0.00E+00	1.87E-04	1.96E+00	1.37E+01	1.37E+01	4
102	17.175	24.255	5	0.00E+00	1.76E-01	0.00E+00	1.13E-07	1.99E+00	1.39E+01	1.39E+01	4
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	2.32E-03	1.13E+01	7.91E+01	7.91E+01	8
104	17.452	24.521	5	0.00E+00	6.17E-01	0.00E+00	9.71E-05	1.76E+00	1.23E+01	1.23E+01	4
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	2.52E-05	1.88E+00	1.32E+01	1.32E+01	4
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	1.77E-04	2.08E+00	1.46E+01	1.46E+01	4
107	17.369	24.259	5	0.00E+00	5.32E+00	0.00E+00	7.08E-03	2.64E+01	1.85E+02	1.85E+02	8
108	17.177	24.439	5	0.00E+00	4.15E-01	0.00E+00	5.68E-05	1.31E+00	9.17E+00	9.17E+00	4
109	17.196	24.503	5	0.00E+00	1.00E+00	0.00E+00	4.10E-04	2.87E+00	2.01E+01	2.01E+01	5
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	7.88E-04	4.30E+00	3.01E+01	3.01E+01	6
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	1.25E-03	6.85E+00	4.80E+01	4.80E+01	6
112	17.244	24.171	5	0.00E+00	4.78E-01	0.00E+00	2.14E-03	1.10E+01	7.70E+01	7.70E+01	8
113	17.262	24.275	5	0.00E+00	5.07E+00	0.00E+00	5.97E-03	2.28E+01	1.60E+02	1.60E+02	8
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	4.01E-04	2.52E+00	1.76E+01	1.76E+01	5
115	17.323	24.549	5	2.11E-01	6.72E+01	2.95E-01	6.47E-01	1.92E+02	1.34E+03	1.35E+03	8
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	3.26E-04	1.55E+00	1.09E+01	1.09E+01	4
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	4.30E-04	3.88E+00	2.72E+01	2.72E+01	5
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	1.52E-08	6.74E-01	4.72E+00	4.72E+00	3
119	17.263	24.484	5	6.00E-02	2.33E+01	8.40E-02	1.86E-01	6.66E+01	4.66E+02	4.67E+02	8
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	1.70E-07	1.62E+00	1.13E+01	1.13E+01	4
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	4.17E-04	2.81E+00	1.97E+01	1.97E+01	5
196	17.329	24.294	5	0.00E+00	1.09E+01	0.00E+00	1.07E-02	4.04E+01	2.83E+02	2.83E+02	8
197	17.350	24.467	5	1.25E-01	3.70E+01	1.75E-01	3.80E-01	1.06E+02	7.43E+02	7.43E+02	8
204	17.183	24.370	5	0.00E+00	5.22E-01	0.00E+00	2.66E-04	2.24E+00	1.57E+01	1.57E+01	5
206	17.314	24.187	5	0.00E+00	1.58E+00	0.00E+00	6.23E-03	2.28E+01	1.60E+02	1.60E+02	8
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	1.11E-03	6.83E+00	4.78E+01	4.78E+01	6
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	6.71E-05	1.45E+00	1.02E+01	1.02E+01	4
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	2.07E-03	9.67E+00	6.77E+01	6.77E+01	7
210	17.248	24.378	5	3.87E-07	8.38E+00	5.42E-07	6.89E-03	2.62E+01	1.83E+02	1.83E+02	8
211	17.359	24.366	5	7.33E-03	1.75E+01	1.03E-02	3.64E-02	5.27E+01	3.69E+02	3.69E+02	8
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	9.21E-04	4.87E+00	3.41E+01	3.41E+01	6
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	3.98E-04	2.60E+00	1.82E+01	1.82E+01	5
253	17.471	24.264	5	0.00E+00	3.54E-01	0.00E+00	1.40E-04	2.33E+00	1.63E+01	1.63E+01	5
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-01	3.58E+00	3.58E+00	3
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	3.61E-04	2.66E+00	1.86E+01	1.86E+01	5
261	17.537	24.105	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-01	9.45E-01	9.45E-01	2
262	17.535	24.181	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-01	9.24E-01	9.24E-01	2
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	2.40E-04	2.32E+00	1.62E+01	1.62E+01	5
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+00	8.33E+00	8.33E+00	4

VX MRLS
Moderate Attack
Height of Release: 15m

Height of Release: 10m											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected				240 rounds at aimpoint (17.35, 25.50)							
3	17.181	23.524	2	2.51E-01	0.00E+00	3.51E-01	2.51E-01	0.00E+00	3.51E-01	7.03E-01	2
48	17.187	23.651	5	2.94E-01	0.00E+00	4.12E-01	2.94E-01	0.00E+00	4.12E-01	8.23E-01	2
49	17.468	24.443	5	3.64E+00	1.32E+01	5.10E+00	3.64E+00	1.32E+01	9.75E+01	1.03E+02	8
50	17.487	24.398	5	3.34E+00	1.07E+01	4.68E+00	3.34E+00	1.07E+01	7.96E+01	8.43E+01	8
52	17.293	24.340	5	1.74E+00	3.69E+00	2.44E+00	1.74E+00	3.69E+00	2.83E+01	3.07E+01	6
53	17.202	24.669	5	1.67E+00	8.75E+00	2.34E+00	1.67E+00	8.75E+00	6.36E+01	6.59E+01	7

Table F4
VX Exposure Estimates
Support Brigade

54	17.418	24.675	5	9.46E+00	5.08E+01	1.32E+01	9.46E+00	5.08E+01	3.69E+02	3.82E+02	8
55	17.339	24.697	5	6.63E+00	3.48E+01	9.28E+00	6.63E+00	3.48E+01	2.53E+02	2.62E+02	8
56	17.274	24.597	5	2.96E+00	1.40E+01	4.14E+00	2.96E+00	1.40E+01	1.02E+02	1.06E+02	8
57	17.347	24.131	5	1.55E+00	1.55E+00	2.17E+00	1.55E+00	1.55E+00	1.30E+01	1.52E+01	5
58	17.336	24.001	5	1.25E+00	6.63E-01	1.75E+00	1.25E+00	6.63E-01	6.39E+00	8.14E+00	4
59	17.205	23.842	5	4.14E-01	0.00E+00	5.80E-01	4.14E-01	0.00E+00	5.80E-01	1.16E+00	2
60	17.421	24.329	5	2.71E+00	6.53E+00	3.79E+00	2.71E+00	6.53E+00	4.95E+01	5.33E+01	7
85	17.884	22.396	5	4.16E-03	0.00E+00	5.82E-03	4.16E-03	0.00E+00	5.82E-03	1.16E-02	1
91	17.898	22.639	5	8.56E-03	0.00E+00	1.20E-02	8.56E-03	0.00E+00	1.20E-02	2.40E-02	1
100	17.232	23.912	5	6.09E-01	1.68E-01	8.53E-01	6.09E-01	1.68E-01	2.03E+00	2.88E+00	2
101	17.439	24.597	5	6.25E+00	3.17E+01	8.75E+00	6.25E+00	3.17E+01	2.31E+02	2.39E+02	8
102	17.175	24.255	5	4.22E-01	4.42E-01	5.91E-01	4.22E-01	4.42E-01	3.68E+00	4.28E+00	3
103	17.359	24.059	5	1.47E+00	1.11E+00	2.06E+00	1.47E+00	1.11E+00	9.83E+00	1.19E+01	4
104	17.452	24.521	5	4.48E+00	1.98E+01	6.27E+00	4.48E+00	1.98E+01	1.45E+02	1.51E+02	8
105	17.223	23.804	5	4.99E-01	0.00E+00	6.99E-01	4.99E-01	0.00E+00	6.99E-01	1.40E+00	2
106	17.181	24.103	5	3.90E-01	2.18E-01	5.46E-01	3.90E-01	2.18E-01	2.07E+00	2.62E+00	2
107	17.369	24.259	5	2.05E+00	3.49E+00	2.87E+00	2.05E+00	3.49E+00	2.73E+01	3.02E+01	6
108	17.177	24.439	5	5.99E-01	1.32E+00	8.39E-01	5.99E-01	1.32E+00	1.01E+01	1.09E+01	4
109	17.196	24.503	5	9.56E-01	2.93E+00	1.34E+00	9.56E-01	2.93E+00	2.18E+01	2.32E+01	5
110	17.283	23.842	5	8.28E-01	1.36E-01	1.16E+00	8.28E-01	1.36E-01	2.11E+00	3.27E+00	3
111	17.266	23.993	5	8.72E-01	4.51E-01	1.22E+00	8.72E-01	4.51E-01	4.38E+00	5.60E+00	3
112	17.244	24.171	5	9.64E-01	1.17E+00	1.35E+00	9.64E-01	1.17E+00	9.54E+00	1.09E+01	4
113	17.262	24.275	5	1.31E+00	2.27E+00	1.83E+00	1.31E+00	2.27E+00	1.77E+01	1.96E+01	5
114	17.357	23.679	5	9.96E-01	0.00E+00	1.39E+00	9.96E-01	0.00E+00	1.39E+00	2.79E+00	2
115	17.323	24.549	5	3.13E+00	1.27E+01	4.38E+00	3.13E+00	1.27E+01	9.33E+01	9.77E+01	8
116	17.342	23.597	5	8.90E-01	0.00E+00	1.25E+00	8.90E-01	0.00E+00	1.25E+00	2.49E+00	2
117	17.349	23.785	5	1.05E+00	7.46E-02	1.47E+00	1.05E+00	7.46E-02	1.99E+00	3.46E+00	3
118	17.359	23.524	5	8.84E-01	0.00E+00	1.24E+00	8.84E-01	0.00E+00	1.24E+00	2.48E+00	2
119	17.263	24.484	5	2.04E+00	7.10E+00	2.86E+00	2.04E+00	7.10E+00	5.26E+01	5.54E+01	7
143	17.185	23.996	5	3.73E-01	8.03E-02	5.22E-01	3.73E-01	8.03E-02	1.08E+00	1.61E+00	2
187	17.885	22.726	5	3.04E-02	0.00E+00	4.26E-02	3.04E-02	0.00E+00	4.26E-02	8.51E-02	1
193	17.263	23.765	5	6.79E-01	0.00E+00	9.51E-01	6.79E-01	0.00E+00	9.51E-01	1.90E+00	2
195	17.552	24.359	5	2.59E+00	6.39E+00	3.63E+00	2.59E+00	6.39E+00	4.84E+01	5.20E+01	7
196	17.329	24.294	5	1.89E+00	3.31E+00	2.65E+00	1.89E+00	3.31E+00	2.58E+01	2.85E+01	5
197	17.350	24.467	5	2.89E+00	9.58E+00	4.05E+00	2.89E+00	9.58E+00	7.11E+01	7.52E+01	8
204	17.183	24.370	5	5.87E-01	1.08E+00	8.22E-01	5.87E-01	1.08E+00	8.38E+00	9.20E+00	4
206	17.314	24.187	5	1.48E+00	1.82E+00	2.07E+00	1.48E+00	1.82E+00	1.48E+01	1.69E+01	5
207	17.355	23.946	5	1.25E+00	4.72E-01	1.75E+00	1.25E+00	4.72E-01	5.05E+00	6.80E+00	4
208	17.275	23.609	5	6.57E-01	0.00E+00	9.20E-01	6.57E-01	0.00E+00	9.20E-01	1.84E+00	2
209	17.266	24.069	5	9.62E-01	7.40E-01	1.35E+00	9.62E-01	7.40E-01	6.53E+00	7.87E+00	4
210	17.248	24.378	5	1.45E+00	3.58E+00	2.03E+00	1.45E+00	3.58E+00	2.71E+01	2.91E+01	5
211	17.359	24.366	5	2.43E+00	6.15E+00	3.40E+00	2.43E+00	6.15E+00	4.65E+01	4.99E+01	6
212	17.355	23.859	5	1.14E+00	2.26E-01	1.60E+00	1.14E+00	2.26E-01	3.18E+00	4.77E+00	3
213	17.275	23.713	5	7.08E-01	0.00E+00	9.91E-01	7.08E-01	0.00E+00	9.91E-01	1.98E+00	2
253	17.471	24.264	5	2.52E+00	5.01E+00	3.53E+00	2.52E+00	5.01E+00	3.86E+01	4.21E+01	6
254	17.479	23.766	5	1.29E+00	2.53E-01	1.81E+00	1.29E+00	2.53E-01	3.58E+00	5.38E+00	3
256	17.694	23.745	5	1.07E+00	9.84E-02	1.50E+00	1.07E+00	9.84E-02	2.19E+00	3.68E+00	3
257	17.825	23.345	5	3.07E-01	0.00E+00	4.30E-01	3.07E-01	0.00E+00	4.30E-01	8.60E-01	2
258	17.872	23.363	5	1.43E-01	0.00E+00	2.00E-01	1.43E-01	0.00E+00	2.00E-01	4.00E-01	2
259	17.464	24.139	5	2.03E+00	2.51E+00	2.84E+00	2.03E+00	2.51E+00	2.04E+01	2.33E+01	5
260	17.671	24.255	5	2.11E+00	3.72E+00	2.95E+00	2.11E+00	3.72E+00	2.90E+01	3.19E+01	6
261	17.537	24.105	5	1.76E+00	1.71E+00	2.46E+00	1.76E+00	1.71E+00	1.44E+01	1.69E+01	5
262	17.535	24.181	5	1.98E+00	2.71E+00	2.77E+00	1.98E+00	2.71E+00	2.17E+01	2.45E+01	5
264	17.946	23.354	5	8.47E-03	0.00E+00	1.19E-02	8.47E-03	0.00E+00	1.19E-02	2.37E-02	1
266	17.871	23.446	5	1.62E-01	0.00E+00	2.27E-01	1.62E-01	0.00E+00	2.27E-01	4.54E-01	2
272	17.654	24.088	5	1.62E+00	1.49E+00	2.27E+00	1.62E+00	1.49E+00	1.27E+01	1.50E+01	4
274	17.554	23.728	5	1.13E+00	0.00E+00	1.58E+00	1.13E+00	0.00E+00	1.58E+00	3.16E+00	3
275	17.659	23.893	5	1.28E+00	4.30E-01	1.79E+00	1.28E+00	4.30E-01	4.80E+00	6.59E+00	4
276	17.445	23.969	5	1.60E+00	9.47E-01	2.24E+00	1.60E+00	9.47E-01	8.87E+00	1.11E+01	4
277	17.554	23.921	5	1.36E+00	4.81E-01	1.90E+00	1.36E+00	4.81E-01	5.27E+00	7.18E+00	4
278	17.752	24.260	5	1.71E+00	2.77E+00	2.39E+00	1.71E+00	2.77E+00	2.18E+01	2.42E+01	5
280	17.642	24.022	5	1.48E+00	9.31E-01	2.07E+00	1.48E+00	9.31E-01	8.59E+00	1.07E+01	4
281	17.580	24.093	5	1.60E+00	1.30E+00	2.24E+00	1.60E+00	1.30E+00	1.13E+01	1.36E+01	4
283	17.536	23.658	5	1.10E+00	0.00E+00	1.54E+00	1.10E+00	0.00E+00	1.54E+00	3.08E+00	3
284	17.455	23.844	5	1.41E+00	4.00E-01	1.97E+00	1.41E+00	4.00E-01	4.77E+00	6.75E+00	4
286	17.668	23.823	5	1.18E+00	2.61E-01	1.65E+00	1.18E+00	2.61E-01	3.48E+00	5.13E+00	3
287	17.953	23.437	5	3.26E-03	0.00E+00	4.56E-03	3.26E-03	0.00E+00	4.56E-03	9.13E-03	1
288	17.572	23.825	5	1.21E+00	1.07E-01	1.69E+00	1.21E+00	1.07E-01	2.44E+00	4.14E+00	3

Table F4
VX Exposure Estimates
Support Brigade

289	17.538	23.994	5	1.52E+00	9.23E-01	2.13E+00	1.52E+00	9.23E-01	8.59E+00	1.07E+01	4
Case 2: Protected 240 rounds at aimpoint (17.50, 25.65)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	3.71E-01	0.00E+00	5.19E-01	5.19E-01	2
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	6.30E-01	0.00E+00	8.82E-01	8.82E-01	2
49	17.468	24.443	5	1.10E-01	0.00E+00	1.54E-01	2.17E+00	2.00E+01	1.43E+02	1.43E+02	8
50	17.487	24.398	5	9.67E-04	0.00E+00	1.35E-03	1.92E+00	1.59E+01	1.14E+02	1.14E+02	8
52	17.293	24.340	5	5.08E-03	0.00E+00	7.11E-03	2.14E+00	1.48E+01	1.07E+02	1.07E+02	8
53	17.202	24.669	5	1.24E+00	1.87E+01	1.74E+00	5.32E+00	8.85E+01	6.27E+02	6.29E+02	8
54	17.418	24.675	5	1.34E+00	1.11E+01	1.88E+00	5.41E+00	7.46E+01	5.30E+02	5.32E+02	8
55	17.339	24.697	5	1.90E+00	8.07E+01	2.66E+00	7.02E+00	2.69E+02	1.89E+03	1.90E+03	8
56	17.274	24.597	5	1.38E+00	1.56E+01	1.93E+00	5.81E+00	7.84E+01	5.57E+02	5.59E+02	8
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	1.81E+00	4.93E+00	3.70E+01	3.70E+01	6
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	1.59E+00	2.35E+00	1.87E+01	1.87E+01	5
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	1.05E+00	4.40E-01	4.55E+00	4.55E+00	3
60	17.421	24.329	5	1.76E-03	0.00E+00	2.46E-03	1.81E+00	1.01E+01	7.32E+01	7.32E+01	7
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	1.25E+00	9.78E-01	8.60E+00	8.60E+00	4
101	17.439	24.597	5	6.38E-01	4.20E+00	8.93E-01	3.58E+00	4.69E+01	3.33E+02	3.34E+02	8
102	17.175	24.255	5	0.00E+00	0.00E+00	0.00E+00	1.45E+00	5.63E+00	4.14E+01	4.14E+01	6
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	1.65E+00	3.09E+00	2.39E+01	2.39E+01	5
104	17.452	24.521	5	2.99E-01	1.04E+00	4.19E-01	2.64E+00	3.02E+01	2.15E+02	2.16E+02	8
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	1.03E+00	3.97E-01	4.22E+00	4.22E+00	3
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	1.31E+00	2.43E+00	1.88E+01	1.88E+01	5
107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	1.93E+00	9.37E+00	6.83E+01	6.83E+01	7
108	17.177	24.439	5	4.85E-02	0.00E+00	6.79E-02	1.81E+00	1.53E+01	1.10E+02	1.10E+02	8
109	17.196	24.503	5	1.88E-01	1.13E-01	2.63E-01	2.35E+00	2.62E+01	1.87E+02	1.87E+02	8
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	1.24E+00	7.93E-01	7.29E+00	7.29E+00	4
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	1.50E+00	2.00E+00	1.61E+01	1.61E+01	5
112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	1.70E+00	5.16E+00	3.85E+01	3.85E+01	6
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	1.92E+00	9.76E+00	7.10E+01	7.10E+01	7
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	8.73E-01	1.55E-01	2.31E+00	2.31E+00	2
115	17.323	24.549	5	1.10E+00	7.88E+00	1.54E+00	5.14E+00	6.72E+01	4.78E+02	4.79E+02	8
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	6.92E-01	0.00E+00	9.69E-01	9.69E-01	2
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	1.14E+00	5.43E-01	5.40E+00	5.40E+00	3
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	5.18E-01	0.00E+00	7.25E-01	7.25E-01	2
119	17.263	24.484	5	4.21E-01	5.09E-01	5.89E-01	3.28E+00	3.55E+01	2.53E+02	2.54E+02	8
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.34E+00	1.10E+01	1.10E+01	4
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	1.04E+00	3.91E-01	4.19E+00	4.19E+00	3
195	17.552	24.359	5	0.00E+00	0.00E+00	0.00E+00	1.96E+00	1.31E+01	9.44E+01	9.44E+01	8
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	2.08E+00	1.24E+01	8.97E+01	8.97E+01	8
197	17.350	24.467	5	4.97E-01	6.60E-01	6.96E-01	3.60E+00	3.75E+01	2.68E+02	2.68E+02	8
204	17.183	24.370	5	3.25E-04	0.00E+00	4.55E-04	1.65E+00	1.07E+01	7.72E+01	7.72E+01	8
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	1.90E+00	7.03E+00	5.19E+01	5.19E+01	7
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	1.46E+00	1.65E+00	1.36E+01	1.36E+01	4
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	6.96E-01	0.00E+00	9.74E-01	9.74E-01	2
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	1.62E+00	3.01E+00	2.33E+01	2.33E+01	5
210	17.248	24.378	5	6.11E-03	0.00E+00	8.55E-03	2.06E+00	1.63E+01	1.17E+02	1.17E+02	8
211	17.359	24.366	5	1.48E-02	0.00E+00	2.07E-02	2.20E+00	1.79E+01	1.28E+02	1.28E+02	8
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	1.29E+00	9.41E-01	8.39E+00	8.39E+00	4
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	9.34E-01	2.26E-01	2.89E+00	2.89E+00	2
253	17.471	24.264	5	0.00E+00	0.00E+00	0.00E+00	1.69E+00	7.30E+00	5.35E+01	5.35E+01	7
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	9.92E-01	2.54E-01	3.17E+00	3.17E+00	3
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	2.67E-01	0.00E+00	3.74E-01	3.74E-01	2
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	1.52E+00	3.49E+00	2.66E+01	2.66E+01	5
260	17.671	24.255	5	0.00E+00	0.00E+00	0.00E+00	6.51E-01	1.98E+00	1.48E+01	1.48E+01	4
261	17.537	24.105	5	0.00E+00	0.00E+00	0.00E+00	1.55E+00	3.33E+00	2.55E+01	2.55E+01	5
262	17.535	24.181	5	0.00E+00	0.00E+00	0.00E+00	1.66E+00	5.25E+00	3.91E+01	3.91E+01	6
272	17.654	24.088	5	0.00E+00	0.00E+00	0.00E+00	7.27E-01	1.18E+00	9.28E+00	9.28E+00	4
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	8.98E-01	1.11E-01	2.03E+00	2.03E+00	2
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	5.83E-01	2.18E-01	2.34E+00	2.34E+00	2
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	1.31E+00	1.22E+00	1.04E+01	1.04E+01	4
277	17.554	23.921	5	0.00E+00	0.00E+00	0.00E+00	1.26E+00	1.01E+00	8.83E+00	8.83E+00	4
278	17.752	24.260	5	0.00E+00	0.00E+00	0.00E+00	4.75E-02	0.00E+00	6.65E-02	6.65E-02	1
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	7.95E-01	9.66E-01	7.88E+00	7.88E+00	4
281	17.580	24.093	5	0.00E+00	0.00E+00	0.00E+00	1.37E+00	2.63E+00	2.03E+01	2.03E+01	5
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	7.50E-01	1.21E-02	1.13E+00	1.13E+00	2
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	1.12E+00	4.50E-01	4.72E+00	4.72E+00	3
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	4.74E-01	2.49E-02	8.38E-01	8.38E-01	2
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	1.03E+00	3.86E-01	4.14E+00	4.14E+00	3

Table F4
VX Exposure Estimates
Support Brigade

289	17.538	23.994	5	0.00E+00	0.00E+00	0.00E+00	1.39E+00	1.71E+00	1.39E+01	1.39E+01	4
299	16.908	25.062	5	0.00E+00	0.00E+00	0.00E+00	2.19E-08	0.00E+00	3.07E-08	3.07E-08	1

VX MRLS
Heavy Attack
Height of Release: 15m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				720 rounds at aimpoint (17.70, 26.20)								
1	18.436	22.418	1	1.94E-02	0.00E+00	2.72E-02	1.94E-02	0.00E+00	2.72E-02	5.43E-02	1	
3	17.181	23.524	2	7.30E-01	0.00E+00	1.02E+00	7.30E-01	0.00E+00	1.02E+00	2.04E+00	2	
47	17.923	22.204	5	1.02E+00	0.00E+00	1.43E+00	1.02E+00	0.00E+00	1.43E+00	2.86E+00	2	
48	17.187	23.651	5	8.17E-01	0.00E+00	1.14E+00	8.17E-01	0.00E+00	1.14E+00	2.29E+00	2	
49	17.468	24.443	5	4.85E+00	1.02E+01	6.79E+00	4.85E+00	1.02E+01	7.82E+01	8.50E+01	8	
50	17.487	24.398	5	4.46E+00	8.27E+00	6.24E+00	4.46E+00	8.27E+00	6.41E+01	7.04E+01	7	
52	17.293	24.340	5	2.59E+00	3.24E+00	3.63E+00	2.59E+00	3.24E+00	2.63E+01	2.99E+01	5	
53	17.202	24.669	5	3.01E+00	8.83E+00	4.21E+00	3.01E+00	8.83E+00	6.60E+01	7.02E+01	7	
54	17.418	24.675	5	7.40E+00	2.73E+01	1.04E+01	7.40E+00	2.73E+01	2.01E+02	2.12E+02	8	
55	17.339	24.697	5	4.97E+00	1.71E+01	6.96E+00	4.97E+00	1.71E+01	1.27E+02	1.34E+02	8	
56	17.274	24.597	5	3.64E+00	9.88E+00	5.10E+00	3.64E+00	9.88E+00	7.43E+01	7.94E+01	8	
57	17.347	24.131	5	2.39E+00	1.43E+00	3.35E+00	2.39E+00	1.43E+00	1.34E+01	1.67E+01	5	
58	17.336	24.001	5	2.06E+00	6.57E-01	2.88E+00	2.06E+00	6.57E-01	7.48E+00	1.04E+01	4	
59	17.205	23.842	5	1.05E+00	1.06E-02	1.47E+00	1.05E+00	1.06E-02	1.54E+00	3.01E+00	3	
60	17.421	24.329	5	3.81E+00	5.65E+00	5.33E+00	3.81E+00	5.65E+00	4.49E+01	5.02E+01	7	
70	18.282	22.390	5	2.59E-01	0.00E+00	3.63E-01	2.59E-01	0.00E+00	3.63E-01	7.25E-01	2	
72	17.445	26.254	5	2.39E-02	0.00E+00	3.35E-02	2.39E-02	0.00E+00	3.35E-02	6.69E-02	1	
73	17.815	26.257	5	2.50E+00	0.00E+00	3.50E+00	2.50E+00	0.00E+00	3.50E+00	7.00E+00	4	
79	18.238	22.525	5	4.14E-01	0.00E+00	5.80E-01	4.14E-01	0.00E+00	5.80E-01	1.16E+00	2	
80	18.435	22.682	5	2.11E-02	0.00E+00	2.95E-02	2.11E-02	0.00E+00	2.95E-02	5.91E-02	1	
83	18.456	22.521	5	8.14E-03	0.00E+00	1.14E-02	8.14E-03	0.00E+00	1.14E-02	2.28E-02	1	
85	17.884	22.396	5	1.16E+00	0.00E+00	1.62E+00	1.16E+00	0.00E+00	1.62E+00	3.25E+00	3	
87	17.977	22.662	5	1.20E+00	0.00E+00	1.68E+00	1.20E+00	0.00E+00	1.68E+00	3.36E+00	3	
89	18.290	22.615	5	2.61E-01	0.00E+00	3.65E-01	2.61E-01	0.00E+00	3.65E-01	7.31E-01	2	
90	18.430	22.295	5	2.25E-02	0.00E+00	3.15E-02	2.25E-02	0.00E+00	3.15E-02	6.30E-02	1	
91	17.898	22.639	5	1.30E+00	0.00E+00	1.82E+00	1.30E+00	0.00E+00	1.82E+00	3.64E+00	3	
92	18.185	22.679	5	6.48E-01	0.00E+00	9.07E-01	6.48E-01	0.00E+00	9.07E-01	1.81E+00	2	
93	17.348	26.251	5	6.11E-05	0.00E+00	8.55E-05	6.11E-05	0.00E+00	8.55E-05	1.71E-04	1	
100	17.232	23.912	5	1.32E+00	2.16E-01	1.85E+00	1.32E+00	2.16E-01	3.36E+00	5.21E+00	3	
101	17.439	24.597	5	6.12E+00	2.06E+01	8.57E+00	6.12E+00	2.06E+01	1.53E+02	1.61E+02	8	
102	17.175	24.255	5	1.16E+00	9.32E-01	1.62E+00	1.16E+00	9.32E-01	8.15E+00	9.77E+00	4	
103	17.359	24.059	5	2.33E+00	1.07E+00	3.26E+00	2.33E+00	1.07E+00	1.08E+01	1.40E+01	4	
104	17.452	24.521	5	5.60E+00	1.49E+01	7.84E+00	5.60E+00	1.49E+01	1.12E+02	1.20E+02	8	
105	17.223	23.804	5	1.15E+00	4.64E-03	1.61E+00	1.15E+00	4.64E-03	1.64E+00	3.25E+00	3	
106	17.181	24.103	5	1.07E+00	4.52E-01	1.50E+00	1.07E+00	4.52E-01	4.66E+00	6.16E+00	4	
107	17.369	24.259	5	2.96E+00	3.11E+00	4.14E+00	2.96E+00	3.11E+00	2.59E+01	3.01E+01	6	
108	17.177	24.439	5	1.51E+00	2.36E+00	2.11E+00	1.51E+00	2.36E+00	1.86E+01	2.07E+01	5	
109	17.196	24.503	5	2.13E+00	4.07E+00	2.98E+00	2.13E+00	4.07E+00	3.15E+01	3.45E+01	6	
110	17.283	23.842	5	1.56E+00	1.36E-01	2.18E+00	1.56E+00	1.36E-01	3.14E+00	5.32E+00	3	
111	17.266	23.993	5	1.64E+00	4.33E-01	2.30E+00	1.64E+00	4.33E-01	5.33E+00	7.62E+00	4	
112	17.244	24.171	5	1.82E+00	1.20E+00	2.55E+00	1.82E+00	1.20E+00	1.09E+01	1.35E+01	4	
113	17.262	24.275	5	2.21E+00	2.21E+00	3.09E+00	2.21E+00	2.21E+00	1.86E+01	2.17E+01	5	
114	17.357	23.679	5	1.78E+00	9.26E-03	2.49E+00	1.78E+00	9.26E-03	2.56E+00	5.05E+00	3	
115	17.323	24.549	5	3.74E+00	8.84E+00	5.24E+00	3.74E+00	8.84E+00	6.71E+01	7.24E+01	7	
116	17.342	23.597	5	1.63E+00	0.00E+00	2.28E+00	1.63E+00	0.00E+00	2.28E+00	4.56E+00	3	
117	17.349	23.785	5	1.84E+00	1.38E-01	2.58E+00	1.84E+00	1.38E-01	3.54E+00	6.12E+00	4	
118	17.359	23.524	5	1.65E+00	0.00E+00	2.31E+00	1.65E+00	0.00E+00	2.31E+00	4.62E+00	3	
119	17.263	24.484	5	2.99E+00	5.79E+00	4.19E+00	2.99E+00	5.79E+00	4.47E+01	4.89E+01	6	
126	17.927	22.304	5	1.07E+00	0.00E+00	1.50E+00	1.07E+00	0.00E+00	1.50E+00	3.00E+00	2	
127	18.068	22.411	5	9.08E-01	0.00E+00	1.27E+00	9.08E-01	0.00E+00	1.27E+00	2.54E+00	2	
128	18.221	22.341	5	4.35E-01	0.00E+00	6.09E-01	4.35E-01	0.00E+00	6.09E-01	1.22E+00	2	
129	17.950	22.413	5	1.11E+00	0.00E+00	1.55E+00	1.11E+00	0.00E+00	1.55E+00	3.11E+00	3	
130	18.113	22.192	5	7.09E-01	0.00E+00	9.93E-01	7.09E-01	0.00E+00	9.93E-01	1.99E+00	2	
131	18.022	22.275	5	9.34E-01	0.00E+00	1.31E+00	9.34E-01	0.00E+00	1.31E+00	2.62E+00	2	
132	18.150	22.445	5	6.98E-01	0.00E+00	9.77E-01	6.98E-01	0.00E+00	9.77E-01	1.95E+00	2	

Table F4
VX Exposure Estimates
Support Brigade

143	17.185	23.996	5	9.98E-01	2.09E-01	1.40E+00	9.98E-01	2.09E-01	2.86E+00	4.26E+00	3
172	17.953	26.234	5	2.41E-02	4.09E-01	3.37E-02	2.41E-02	4.09E-01	2.90E+00	2.93E+00	2
187	17.885	22.726	5	1.36E+00	0.00E+00	1.90E+00	1.36E+00	0.00E+00	1.90E+00	3.81E+00	3
191	18.361	22.159	5	8.39E-02	0.00E+00	1.17E-01	8.39E-02	0.00E+00	1.17E-01	2.35E-01	1
193	17.263	23.765	5	1.37E+00	8.89E-03	1.92E+00	1.37E+00	8.89E-03	1.98E+00	3.90E+00	3
195	17.552	24.359	5	4.14E+00	7.43E+00	5.80E+00	4.14E+00	7.43E+00	5.78E+01	6.36E+01	7
196	17.329	24.294	5	2.70E+00	2.91E+00	3.78E+00	2.70E+00	2.91E+00	2.42E+01	2.79E+01	5
197	17.350	24.467	5	3.53E+00	6.61E+00	4.94E+00	3.53E+00	6.61E+00	5.12E+01	5.62E+01	7
198	18.347	22.723	5	1.26E-01	0.00E+00	1.76E-01	1.26E-01	0.00E+00	1.76E-01	3.53E-01	2
204	17.183	24.370	5	1.48E+00	1.92E+00	2.07E+00	1.48E+00	1.92E+00	1.55E+01	1.76E+01	5
206	17.314	24.187	5	2.27E+00	1.63E+00	3.18E+00	2.27E+00	1.63E+00	1.46E+01	1.78E+01	5
207	17.355	23.946	5	2.10E+00	5.27E-01	2.94E+00	2.10E+00	5.27E-01	6.63E+00	9.57E+00	4
208	17.275	23.609	5	1.32E+00	0.00E+00	1.85E+00	1.32E+00	0.00E+00	1.85E+00	3.70E+00	3
209	17.266	24.069	5	1.78E+00	7.37E-01	2.49E+00	1.78E+00	7.37E-01	7.65E+00	1.01E+01	4
210	17.248	24.378	5	2.41E+00	3.51E+00	3.37E+00	2.41E+00	3.51E+00	2.79E+01	3.13E+01	6
211	17.359	24.366	5	3.22E+00	4.70E+00	4.51E+00	3.22E+00	4.70E+00	3.74E+01	4.19E+01	6
212	17.355	23.859	5	1.97E+00	3.00E-01	2.76E+00	1.97E+00	3.00E-01	4.86E+00	7.62E+00	4
213	17.275	23.713	5	1.40E+00	0.00E+00	1.96E+00	1.40E+00	0.00E+00	1.96E+00	3.92E+00	3
217	17.997	22.157	5	9.14E-01	0.00E+00	1.28E+00	9.14E-01	0.00E+00	1.28E+00	2.56E+00	2
218	18.129	22.348	5	7.23E-01	0.00E+00	1.01E+00	7.23E-01	0.00E+00	1.01E+00	2.02E+00	2
219	18.331	22.261	5	1.37E-01	0.00E+00	1.92E-01	1.37E-01	0.00E+00	1.92E-01	3.84E-01	2
243	18.226	22.183	5	3.88E-01	0.00E+00	5.43E-01	3.88E-01	0.00E+00	5.43E-01	1.09E+00	2
247	17.618	26.228	5	3.98E-01	2.22E+01	5.57E-01	3.98E-01	2.22E+01	1.56E+02	1.57E+02	8
250	18.375	22.578	5	8.13E-02	0.00E+00	1.14E-01	8.13E-02	0.00E+00	1.14E-01	2.28E-01	1
252	18.082	22.652	5	9.89E-01	0.00E+00	1.38E+00	9.89E-01	0.00E+00	1.38E+00	2.77E+00	2
253	17.471	24.264	5	3.76E+00	4.64E+00	5.26E+00	3.76E+00	4.64E+00	3.77E+01	4.30E+01	6
254	17.479	23.766	5	2.31E+00	2.77E-01	3.23E+00	2.31E+00	2.77E-01	5.17E+00	8.41E+00	4
255	18.303	23.109	5	2.53E-01	0.00E+00	3.54E-01	2.53E-01	0.00E+00	3.54E-01	7.08E-01	2
256	17.694	23.745	5	2.51E+00	4.30E-01	3.51E+00	2.51E+00	4.30E-01	6.52E+00	1.00E+01	4
257	17.825	23.345	5	1.90E+00	0.00E+00	2.66E+00	1.90E+00	0.00E+00	2.66E+00	5.32E+00	3
258	17.872	23.363	5	1.83E+00	0.00E+00	2.56E+00	1.83E+00	0.00E+00	2.56E+00	5.12E+00	3
259	17.464	24.139	5	3.22E+00	2.56E+00	4.51E+00	3.22E+00	2.56E+00	2.24E+01	2.69E+01	5
260	17.671	24.255	5	4.05E+00	5.81E+00	5.67E+00	4.05E+00	5.81E+00	4.63E+01	5.20E+01	7
261	17.537	24.105	5	3.08E+00	2.26E+00	4.31E+00	3.08E+00	2.26E+00	2.01E+01	2.44E+01	5
262	17.535	24.181	5	3.33E+00	3.23E+00	4.66E+00	3.33E+00	3.23E+00	2.73E+01	3.19E+01	6
263	18.375	23.041	5	8.60E-02	0.00E+00	1.20E-01	8.60E-02	0.00E+00	1.20E-01	2.41E-01	1
264	17.946	23.354	5	1.70E+00	0.00E+00	2.38E+00	1.70E+00	0.00E+00	2.38E+00	4.76E+00	3
265	18.322	23.234	5	2.05E-01	0.00E+00	2.87E-01	2.05E-01	0.00E+00	2.87E-01	5.74E-01	2
266	17.871	23.446	5	1.90E+00	0.00E+00	2.66E+00	1.90E+00	0.00E+00	2.66E+00	5.32E+00	3
267	18.457	23.056	5	6.53E-03	0.00E+00	9.14E-03	6.53E-03	0.00E+00	9.14E-03	1.83E-02	1
272	17.654	24.088	5	3.26E+00	2.63E+00	4.56E+00	3.26E+00	2.63E+00	2.30E+01	2.75E+01	5
273	18.388	23.221	5	6.34E-02	0.00E+00	8.88E-02	6.34E-02	0.00E+00	8.88E-02	1.78E-01	1
274	17.554	23.728	5	2.26E+00	2.04E-01	3.16E+00	2.26E+00	2.04E-01	4.59E+00	7.76E+00	4
275	17.659	23.893	5	2.74E+00	1.00E+00	3.84E+00	2.74E+00	1.00E+00	1.08E+01	1.47E+01	4
276	17.445	23.969	5	2.65E+00	1.00E+00	3.71E+00	2.65E+00	1.00E+00	1.07E+01	1.44E+01	4
277	17.554	23.921	5	2.58E+00	8.25E-01	3.61E+00	2.58E+00	8.25E-01	9.39E+00	1.30E+01	4
278	17.752	24.260	5	4.19E+00	5.74E+00	5.87E+00	4.19E+00	5.74E+00	4.60E+01	5.19E+01	7
279	18.479	23.337	5	2.04E-03	0.00E+00	2.86E-03	2.04E-03	0.00E+00	2.86E-03	5.71E-03	1
280	17.642	24.022	5	2.98E+00	1.84E+00	4.17E+00	2.98E+00	1.84E+00	1.71E+01	2.12E+01	5
281	17.580	24.093	5	2.97E+00	2.00E+00	4.16E+00	2.97E+00	2.00E+00	1.82E+01	2.23E+01	5
282	18.448	23.188	5	7.90E-03	0.00E+00	1.11E-02	7.90E-03	0.00E+00	1.11E-02	2.21E-02	1
283	17.536	23.658	5	2.17E+00	5.14E-02	3.04E+00	2.17E+00	5.14E-02	3.40E+00	6.44E+00	4
284	17.455	23.844	5	2.42E+00	4.42E-01	3.39E+00	2.42E+00	4.42E-01	6.48E+00	9.87E+00	4
285	18.364	23.146	5	1.02E-01	0.00E+00	1.43E-01	1.02E-01	0.00E+00	1.43E-01	2.86E-01	2
286	17.668	23.823	5	2.60E+00	7.02E-01	3.64E+00	2.60E+00	7.02E-01	8.55E+00	1.22E+01	4
287	17.953	23.437	5	1.76E+00	0.00E+00	2.46E+00	1.76E+00	0.00E+00	2.46E+00	4.93E+00	3
288	17.572	23.825	5	2.40E+00	4.22E-01	3.36E+00	2.40E+00	4.22E-01	6.31E+00	9.67E+00	4
289	17.538	23.994	5	2.74E+00	1.23E+00	3.84E+00	2.74E+00	1.23E+00	1.24E+01	1.63E+01	5
397	16.906	22.690	5	1.12E-03	0.00E+00	1.57E-03	1.12E-03	0.00E+00	1.57E-03	3.14E-03	1
416	16.932	22.046	5	4.72E-03	0.00E+00	6.61E-03	4.72E-03	0.00E+00	6.61E-03	1.32E-02	1
419	16.952	22.920	5	9.58E-03	0.00E+00	1.34E-02	9.58E-03	0.00E+00	1.34E-02	2.68E-02	1

Case 2: Protected 720 rounds at aimpoint (17.75, 25.75)

3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	7.55E-03	0.00E+00	1.06E-02	1.06E-02	1
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	1.99E-02	0.00E+00	2.79E-02	2.79E-02	1
49	17.468	24.443	5	7.76E-03	0.00E+00	1.09E-02	1.66E+00	5.16E+01	3.64E+02	3.64E+02	8
50	17.487	24.398	5	8.23E-03	0.00E+00	1.15E-02	1.82E+00	4.72E+01	3.33E+02	3.33E+02	8
52	17.293	24.340	5	0.00E+00	0.00E+00	0.00E+00	7.45E-01	5.52E+00	3.97E+01	3.97E+01	6
53	17.202	24.669	5	6.73E-04	2.45E-02	9.42E-04	5.65E-01	1.69E+01	1.19E+02	1.19E+02	8

Table F4
VX Exposure Estimates
Support Brigade

54	17.418	24.675	5	7.97E-02	9.09E-02	1.12E-01	1.52E+00	1.90E+02	1.33E+03	1.33E+03	8
55	17.339	24.697	5	7.70E-02	2.68E+01	1.08E-01	1.82E+00	2.11E+02	1.48E+03	1.48E+03	8
56	17.274	24.597	5	2.22E-02	0.00E+00	3.11E-02	1.22E+00	4.01E+01	2.82E+02	2.82E+02	8
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	6.78E-01	2.94E+00	2.15E+01	2.15E+01	5
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	4.72E-01	1.30E+00	9.76E+00	9.76E+00	4
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	6.96E-02	0.00E+00	9.74E-02	9.74E-02	1
60	17.421	24.329	5	0.00E+00	0.00E+00	0.00E+00	1.08E+00	1.05E+01	7.50E+01	7.50E+01	8
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	1.32E-01	2.07E-02	3.30E-01	3.30E-01	2
101	17.439	24.597	5	1.45E-02	3.12E-02	2.03E-02	1.46E+00	1.15E+02	8.07E+02	8.07E+02	8
102	17.175	24.255	5	0.00E+00	0.00E+00	0.00E+00	1.31E-01	2.18E-01	1.71E+00	1.71E+00	2
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	5.99E-01	2.02E+00	1.50E+01	1.50E+01	4
104	17.452	24.521	5	1.58E-03	1.45E-02	2.21E-03	1.54E+00	6.89E+01	4.84E+02	4.84E+02	8
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	8.25E-02	0.00E+00	1.16E-01	1.16E-01	1
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	1.21E-01	4.53E-03	2.01E-01	2.01E-01	1
107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	8.47E-01	5.86E+00	4.22E+01	4.22E+01	6
108	17.177	24.439	5	0.00E+00	0.00E+00	0.00E+00	2.10E-01	9.77E-01	7.13E+00	7.13E+00	4
109	17.196	24.503	5	0.00E+00	0.00E+00	0.00E+00	3.97E-01	2.18E+00	1.58E+01	1.58E+01	5
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	2.07E-01	7.53E-02	8.17E-01	8.17E-01	2
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	2.54E-01	3.84E-01	3.04E+00	3.04E+00	3
112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	3.21E-01	4.81E-01	3.82E+00	3.82E+00	3
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	4.54E-01	1.83E+00	1.34E+01	1.34E+01	4
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	2.06E-01	0.00E+00	2.88E-01	2.88E-01	2
115	17.323	24.549	5	4.47E-02	0.00E+00	6.26E-02	1.70E+00	4.70E+01	3.31E+02	3.31E+02	8
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	1.28E-01	0.00E+00	1.79E-01	1.79E-01	1
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	3.01E-01	2.33E-01	2.05E+00	2.05E+00	2
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	8.06E-02	0.00E+00	1.13E-01	1.13E-01	1
119	17.263	24.484	5	1.75E-03	0.00E+00	2.45E-03	8.07E-01	8.47E+00	6.04E+01	6.04E+01	7
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	9.30E-02	0.00E+00	1.30E-01	1.30E-01	1
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	1.30E-01	0.00E+00	1.82E-01	1.82E-01	1
195	17.552	24.359	5	1.48E-02	0.00E+00	2.07E-02	1.48E+00	1.32E+01	9.45E+01	9.45E+01	8
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	8.36E-01	7.08E+00	5.07E+01	5.07E+01	7
197	17.350	24.467	5	5.36E-02	0.00E+00	7.50E-02	1.41E+00	2.64E+01	1.87E+02	1.87E+02	8
204	17.183	24.370	5	0.00E+00	0.00E+00	0.00E+00	1.82E-01	7.94E-01	5.81E+00	5.81E+00	3
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	6.29E-01	2.70E+00	1.98E+01	1.98E+01	5
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	4.49E-01	1.03E+00	7.84E+00	7.84E+00	4
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	7.82E-02	0.00E+00	1.09E-01	1.09E-01	1
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	3.21E-01	5.51E-01	4.31E+00	4.31E+00	3
210	17.248	24.378	5	2.32E-04	0.00E+00	3.25E-04	4.33E-01	1.86E+00	1.36E+01	1.36E+01	4
211	17.359	24.366	5	6.16E-03	0.00E+00	8.62E-03	1.02E+00	1.24E+01	8.82E+01	8.82E+01	8
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	3.70E-01	4.32E-01	3.54E+00	3.54E+00	3
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	1.29E-01	0.00E+00	1.81E-01	1.81E-01	1
253	17.471	24.264	5	0.00E+00	0.00E+00	0.00E+00	1.35E+00	1.46E+01	1.04E+02	1.04E+02	8
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	2.94E-01	1.42E-01	1.41E+00	1.41E+00	2
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	3.76E-01	4.07E-01	3.38E+00	3.38E+00	3
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	7.09E-02	0.00E+00	9.93E-02	9.93E-02	1
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	5.78E-02	0.00E+00	8.09E-02	8.09E-02	1
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	9.79E-01	3.16E+00	2.35E+01	2.35E+01	5
260	17.671	24.255	5	3.03E-03	0.00E+00	4.24E-03	1.46E+00	1.77E+01	1.26E+02	1.26E+02	8
261	17.537	24.105	5	0.00E+00	0.00E+00	0.00E+00	8.35E-01	3.30E+00	2.43E+01	2.43E+01	5
262	17.535	24.181	5	0.00E+00	0.00E+00	0.00E+00	1.03E+00	5.31E+00	3.86E+01	3.86E+01	6
264	17.946	23.354	5	0.00E+00	0.00E+00	0.00E+00	5.61E-02	0.00E+00	7.85E-02	7.85E-02	1
265	18.322	23.234	5	0.00E+00	0.00E+00	0.00E+00	1.55E-03	0.00E+00	2.17E-03	2.17E-03	1
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	8.61E-02	0.00E+00	1.21E-01	1.21E-01	1
272	17.654	24.088	5	0.00E+00	0.00E+00	0.00E+00	8.84E-01	3.45E+00	2.54E+01	2.54E+01	5
273	18.388	23.221	5	0.00E+00	0.00E+00	0.00E+00	3.22E-04	0.00E+00	4.51E-04	4.51E-04	1
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	3.46E-01	3.29E-01	2.79E+00	2.79E+00	2
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	5.66E-01	7.87E-01	6.30E+00	6.30E+00	4
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	5.46E-01	4.09E-01	3.63E+00	3.63E+00	3
277	17.554	23.921	5	0.00E+00	0.00E+00	0.00E+00	5.02E-01	1.46E+00	1.09E+01	1.09E+01	4
278	17.752	24.260	5	8.58E-02	0.00E+00	1.20E-01	1.45E+00	1.03E+01	7.41E+01	7.43E+01	7
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	7.31E-01	2.23E+00	1.66E+01	1.66E+01	5
281	17.580	24.093	5	0.00E+00	0.00E+00	0.00E+00	8.41E-01	4.89E+00	3.54E+01	3.54E+01	6
282	18.448	23.188	5	0.00E+00	0.00E+00	0.00E+00	4.05E-06	0.00E+00	5.67E-06	5.67E-06	1
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	2.56E-01	3.29E-02	5.89E-01	5.89E-01	2
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	3.68E-01	3.67E-02	7.72E-01	7.72E-01	2
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	4.82E-01	5.81E-01	4.74E+00	4.74E+00	3
287	17.953	23.437	5	0.00E+00	0.00E+00	0.00E+00	9.10E-02	0.00E+00	1.27E-01	1.27E-01	1
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	4.40E-01	9.56E-01	7.31E+00	7.31E+00	4

Table F4
VX Exposure Estimates
Support Brigade

289	17.538	23.994	5	0.00E+00	0.00E+00	0.00E+00	6.10E-01	1.95E+00	1.45E+01	1.45E+01	4
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VX 250kg Bomb
Light Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops 2 rounds at aimpoint (17.35, 27.10)											
3	17.181	23.524	2	3.62E-02	3.86E-01	5.07E-02	3.62E-02	3.86E-01	2.75E+00	2.80E+00	2
8	17.462	26.876	5	3.89E-01	2.77E+01	5.45E-01	3.89E-01	2.77E+01	1.94E+02	1.95E+02	8
13	17.460	26.751	5	5.32E-01	2.62E+01	7.45E-01	5.32E-01	2.62E+01	1.84E+02	1.85E+02	8
48	17.187	23.651	5	4.22E-02	5.12E-01	5.91E-02	4.22E-02	5.12E-01	3.64E+00	3.70E+00	3
49	17.468	24.443	5	1.82E-01	2.33E+00	2.55E-01	1.82E-01	2.33E+00	1.66E+01	1.68E+01	5
50	17.487	24.398	5	1.96E-01	2.45E+00	2.74E-01	1.96E-01	2.45E+00	1.74E+01	1.77E+01	5
52	17.293	24.340	5	1.35E-01	1.71E+00	1.89E-01	1.35E-01	1.71E+00	1.22E+01	1.23E+01	4
53	17.202	24.669	5	1.99E-01	2.76E+00	2.79E-01	1.99E-01	2.76E+00	1.96E+01	1.99E+01	5
54	17.418	24.675	5	8.00E-02	1.05E+00	1.12E-01	8.00E-02	1.05E+00	7.46E+00	7.57E+00	4
55	17.339	24.697	5	6.32E-02	8.29E-01	8.85E-02	6.32E-02	8.29E-01	5.89E+00	5.98E+00	3
56	17.274	24.597	5	2.65E-01	3.58E+00	3.71E-01	2.65E-01	3.58E+00	2.54E+01	2.58E+01	5
57	17.347	24.131	5	2.49E-02	4.15E-01	3.49E-02	2.49E-02	4.15E-01	2.94E+00	2.97E+00	2
58	17.336	24.001	5	4.17E-02	4.99E-01	5.84E-02	4.17E-02	4.99E-01	3.55E+00	3.61E+00	3
59	17.205	23.842	5	6.85E-02	7.76E-01	9.59E-02	6.85E-02	7.76E-01	5.53E+00	5.62E+00	3
60	17.421	24.329	5	6.79E-02	7.87E-01	9.51E-02	6.79E-02	7.87E-01	5.60E+00	5.70E+00	3
62	17.464	26.662	5	9.90E-01	4.07E+01	1.39E+00	9.90E-01	4.07E+01	2.86E+02	2.88E+02	8
69	17.555	26.861	5	2.25E-04	0.00E+00	3.15E-04	2.25E-04	0.00E+00	3.15E-04	6.30E-04	1
72	17.445	26.254	5	1.75E-02	4.97E-01	2.45E-02	1.75E-02	4.97E-01	3.50E+00	3.53E+00	3
86	17.487	26.466	5	2.78E+01	8.70E+02	3.89E+01	2.78E+01	8.70E+02	6.13E+03	6.17E+03	8
93	17.348	26.251	5	5.88E-07	0.00E+00	8.23E-07	5.88E-07	0.00E+00	8.23E-07	1.65E-06	1
100	17.232	23.912	5	8.72E-02	1.01E+00	1.22E-01	8.72E-02	1.01E+00	7.19E+00	7.31E+00	4
101	17.439	24.597	5	1.39E-01	1.84E+00	1.95E-01	1.39E-01	1.84E+00	1.31E+01	1.33E+01	4
102	17.175	24.255	5	6.74E-02	8.47E-01	9.44E-02	6.74E-02	8.47E-01	6.02E+00	6.12E+00	4
103	17.359	24.059	5	2.02E-02	3.19E-01	2.83E-02	2.02E-02	3.19E-01	2.26E+00	2.29E+00	2
104	17.452	24.521	5	1.62E-01	2.13E+00	2.27E-01	1.62E-01	2.13E+00	1.51E+01	1.54E+01	5
105	17.223	23.804	5	7.51E-02	8.55E-01	1.05E-01	7.51E-02	8.55E-01	6.09E+00	6.20E+00	4
106	17.181	24.103	5	6.04E-02	7.82E-01	8.46E-02	6.04E-02	7.82E-01	5.56E+00	5.64E+00	3
107	17.369	24.259	5	2.12E-02	3.14E-01	2.97E-02	2.12E-02	3.14E-01	2.23E+00	2.26E+00	2
108	17.177	24.439	5	8.85E-02	1.11E+00	1.24E-01	8.85E-02	1.11E+00	7.89E+00	8.02E+00	4
109	17.196	24.503	5	1.43E-01	1.85E+00	2.00E-01	1.43E-01	1.85E+00	1.32E+01	1.34E+01	4
110	17.283	23.842	5	7.41E-02	8.54E-01	1.04E-01	7.41E-02	8.54E-01	6.08E+00	6.19E+00	4
111	17.266	23.993	5	1.00E-01	1.18E+00	1.40E-01	1.00E-01	1.18E+00	8.40E+00	8.54E+00	4
112	17.244	24.171	5	1.34E-01	1.68E+00	1.88E-01	1.34E-01	1.68E+00	1.19E+01	1.21E+01	4
113	17.262	24.275	5	1.56E-01	1.97E+00	2.18E-01	1.56E-01	1.97E+00	1.40E+01	1.42E+01	4
114	17.357	23.679	5	2.93E-02	2.89E-01	4.10E-02	2.93E-02	2.89E-01	2.06E+00	2.11E+00	2
115	17.323	24.549	5	9.74E-02	1.24E+00	1.36E-01	9.74E-02	1.24E+00	8.82E+00	8.95E+00	4
116	17.342	23.597	5	2.94E-02	3.13E-01	4.12E-02	2.94E-02	3.13E-01	2.23E+00	2.27E+00	2
117	17.349	23.785	5	3.60E-02	3.35E-01	5.04E-02	3.60E-02	3.35E-01	2.40E+00	2.45E+00	2
118	17.359	23.524	5	1.92E-02	2.26E-01	2.69E-02	1.92E-02	2.26E-01	1.61E+00	1.64E+00	2
119	17.263	24.484	5	2.27E-01	2.93E+00	3.18E-01	2.27E-01	2.93E+00	2.08E+01	2.11E+01	5
143	17.185	23.996	5	6.24E-02	7.33E-01	8.74E-02	6.24E-02	7.33E-01	5.22E+00	5.31E+00	3
193	17.263	23.765	5	7.72E-02	8.58E-01	1.08E-01	7.72E-02	8.58E-01	6.11E+00	6.22E+00	4
195	17.552	24.359	5	1.23E-01	1.49E+00	1.72E-01	1.23E-01	1.49E+00	1.06E+01	1.08E+01	4
196	17.329	24.294	5	6.51E-02	8.15E-01	9.11E-02	6.51E-02	8.15E-01	5.80E+00	5.89E+00	3
197	17.350	24.467	5	3.57E-02	4.87E-01	5.00E-02	3.57E-02	4.87E-01	3.46E+00	3.51E+00	3
199	17.470	26.332	5	2.85E+00	8.02E+01	3.99E+00	2.85E+00	8.02E+01	5.65E+02	5.69E+02	8
200	17.542	26.309	5	1.18E+00	3.26E+01	1.65E+00	1.18E+00	3.26E+01	2.30E+02	2.32E+02	8
204	17.183	24.370	5	9.41E-02	1.18E+00	1.32E-01	9.41E-02	1.18E+00	8.39E+00	8.52E+00	4
206	17.314	24.187	5	7.65E-02	9.73E-01	1.07E-01	7.65E-02	9.73E-01	6.92E+00	7.03E+00	4
207	17.355	23.946	5	2.88E-02	3.27E-01	4.03E-02	2.88E-02	3.27E-01	2.33E+00	2.37E+00	2
208	17.275	23.609	5	6.33E-02	6.73E-01	8.86E-02	6.33E-02	6.73E-01	4.80E+00	4.89E+00	3
209	17.266	24.069	5	1.11E-01	1.34E+00	1.55E-01	1.11E-01	1.34E+00	9.54E+00	9.69E+00	4
210	17.248	24.378	5	2.00E-01	2.54E+00	2.80E-01	2.00E-01	2.54E+00	1.81E+01	1.83E+01	5
211	17.359	24.366	5	2.92E-02	3.93E-01	4.09E-02	2.92E-02	3.93E-01	2.79E+00	2.83E+00	2
212	17.355	23.859	5	3.21E-02	3.19E-01	4.49E-02	3.21E-02	3.19E-01	2.28E+00	2.32E+00	2
213	17.275	23.713	5	7.21E-02	7.76E-01	1.01E-01	7.21E-02	7.76E-01	5.53E+00	5.63E+00	3

Table F4
VX Exposure Estimates
Support Brigade

235	17.540	26.653	5	7.29E-01	2.95E+01	1.02E+00	7.29E-01	2.95E+01	2.08E+02	2.09E+02	8
242	17.453	26.585	5	2.68E-01	9.75E+00	3.75E-01	2.68E-01	9.75E+00	6.86E+01	6.90E+01	7
246	17.560	26.496	5	5.42E-04	3.01E-03	7.59E-04	5.42E-04	3.01E-03	2.18E-02	2.26E-02	1
248	17.528	26.754	5	1.16E+00	5.74E+01	1.62E+00	1.16E+00	5.74E+01	4.03E+02	4.05E+02	8
253	17.471	24.264	5	1.40E-01	1.68E+00	1.96E-01	1.40E-01	1.68E+00	1.20E+01	1.22E+01	4
254	17.479	23.766	5	8.22E-02	9.18E-01	1.15E-01	8.22E-02	9.18E-01	6.54E+00	6.66E+00	4
259	17.464	24.139	5	1.07E-01	1.30E+00	1.50E-01	1.07E-01	1.30E+00	9.25E+00	9.40E+00	4
261	17.537	24.105	5	9.99E-02	1.22E+00	1.40E-01	9.99E-02	1.22E+00	8.68E+00	8.82E+00	4
262	17.535	24.181	5	1.16E-01	1.40E+00	1.62E-01	1.16E-01	1.40E+00	9.96E+00	1.01E+01	4
274	17.554	23.728	5	6.82E-02	6.72E-01	9.55E-02	6.82E-02	6.72E-01	4.80E+00	4.89E+00	3
276	17.445	23.969	5	7.97E-02	8.83E-01	1.12E-01	7.97E-02	8.83E-01	6.29E+00	6.40E+00	4
277	17.554	23.921	5	8.28E-02	8.60E-01	1.16E-01	8.28E-02	8.60E-01	6.14E+00	6.25E+00	4
280	17.642	24.022	5	3.83E-06	3.45E-02	5.36E-06	3.83E-06	3.45E-02	2.42E-01	2.42E-01	1
281	17.580	24.093	5	4.99E-02	6.26E-01	6.99E-02	4.99E-02	6.26E-01	4.45E+00	4.52E+00	3
283	17.536	23.658	5	6.60E-02	7.04E-01	9.24E-02	6.60E-02	7.04E-01	5.02E+00	5.11E+00	3
284	17.455	23.844	5	8.56E-02	8.67E-01	1.20E-01	8.56E-02	8.67E-01	6.19E+00	6.31E+00	4
288	17.572	23.825	5	5.12E-02	5.89E-01	7.17E-02	5.12E-02	5.89E-01	4.19E+00	4.27E+00	3
289	17.538	23.994	5	9.54E-02	1.08E+00	1.34E-01	9.54E-02	1.08E+00	7.69E+00	7.83E+00	4
Case 2: Protected 2 rounds at aimpoint (17.35, 27.10)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-01	2.51E+00	2.51E+00	2
8	17.462	26.876	5	2.54E-06	9.24E+00	3.56E-06	2.80E-04	2.64E+01	1.85E+02	1.85E+02	8
13	17.460	26.751	5	3.44E-06	8.72E+00	4.82E-06	1.11E-03	2.49E+01	1.74E+02	1.74E+02	8
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-01	3.33E+00	3.33E+00	3
49	17.468	24.443	5	0.00E+00	6.76E-01	0.00E+00	0.00E+00	2.21E+00	1.55E+01	1.55E+01	5
50	17.487	24.398	5	0.00E+00	6.75E-01	0.00E+00	0.00E+00	2.33E+00	1.63E+01	1.63E+01	5
52	17.293	24.340	5	0.00E+00	3.95E-01	0.00E+00	0.00E+00	1.62E+00	1.13E+01	1.13E+01	4
53	17.202	24.669	5	0.00E+00	8.81E-01	0.00E+00	0.00E+00	2.63E+00	1.84E+01	1.84E+01	5
54	17.418	24.675	5	0.00E+00	3.34E-01	0.00E+00	0.00E+00	1.00E+00	7.00E+00	7.00E+00	4
55	17.339	24.697	5	0.00E+00	2.63E-01	0.00E+00	0.00E+00	7.89E-01	5.52E+00	5.52E+00	3
56	17.274	24.597	5	0.00E+00	1.13E+00	0.00E+00	0.00E+00	3.41E+00	2.39E+01	2.39E+01	5
57	17.347	24.131	5	0.00E+00	1.86E-02	0.00E+00	0.00E+00	3.87E-01	2.71E+00	2.71E+00	2
58	17.336	24.001	5	0.00E+00	1.16E-02	0.00E+00	0.00E+00	4.65E-01	3.26E+00	3.26E+00	3
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-01	5.05E+00	5.05E+00	3
60	17.421	24.329	5	0.00E+00	1.80E-01	0.00E+00	0.00E+00	7.44E-01	5.21E+00	5.21E+00	3
62	17.464	26.662	5	5.12E-06	1.36E+01	7.17E-06	2.61E-03	3.88E+01	2.72E+02	2.72E+02	8
69	17.555	26.861	5	0.00E+00	0.00E+00	0.00E+00	1.78E-07	0.00E+00	2.49E-07	2.49E-07	1
72	17.445	26.254	5	0.00E+00	1.66E-01	0.00E+00	2.86E-06	4.74E-01	3.32E+00	3.32E+00	3
86	17.487	26.466	5	1.22E-02	2.90E+02	1.71E-02	2.48E-01	8.29E+02	5.80E+03	5.80E+03	8
100	17.232	23.912	5	0.00E+00	5.95E-03	0.00E+00	0.00E+00	9.39E-01	6.57E+00	6.57E+00	4
101	17.439	24.597	5	0.00E+00	5.76E-01	0.00E+00	0.00E+00	1.75E+00	1.23E+01	1.23E+01	4
102	17.175	24.255	5	0.00E+00	1.44E-01	0.00E+00	0.00E+00	7.98E-01	5.59E+00	5.59E+00	3
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-01	2.07E+00	2.07E+00	2
104	17.452	24.521	5	0.00E+00	6.53E-01	0.00E+00	0.00E+00	2.02E+00	1.41E+01	1.41E+01	4
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-01	5.57E+00	5.57E+00	3
106	17.181	24.103	5	0.00E+00	5.06E-02	0.00E+00	0.00E+00	7.31E-01	5.12E+00	5.12E+00	3
107	17.369	24.259	5	0.00E+00	5.08E-02	0.00E+00	0.00E+00	2.95E-01	2.07E+00	2.07E+00	2
108	17.177	24.439	5	0.00E+00	2.96E-01	0.00E+00	0.00E+00	1.05E+00	7.35E+00	7.35E+00	4
109	17.196	24.503	5	0.00E+00	5.51E-01	0.00E+00	0.00E+00	1.76E+00	1.23E+01	1.23E+01	4
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.94E-01	5.56E+00	5.56E+00	3
111	17.266	23.993	5	0.00E+00	4.65E-02	0.00E+00	0.00E+00	1.10E+00	7.70E+00	7.70E+00	4
112	17.244	24.171	5	0.00E+00	2.25E-01	0.00E+00	0.00E+00	1.58E+00	1.11E+01	1.11E+01	4
113	17.262	24.275	5	0.00E+00	3.94E-01	0.00E+00	0.00E+00	1.86E+00	1.30E+01	1.30E+01	4
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E-01	1.88E+00	1.88E+00	2
115	17.323	24.549	5	0.00E+00	3.71E-01	0.00E+00	0.00E+00	1.18E+00	8.26E+00	8.26E+00	4
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-01	2.04E+00	2.04E+00	2
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-01	2.18E+00	2.18E+00	2
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-01	1.47E+00	1.47E+00	2
119	17.263	24.484	5	0.00E+00	8.71E-01	0.00E+00	0.00E+00	2.79E+00	1.95E+01	1.95E+01	5
143	17.185	23.996	5	0.00E+00	2.55E-02	0.00E+00	0.00E+00	6.83E-01	4.78E+00	4.78E+00	3
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-01	5.59E+00	5.59E+00	3
195	17.552	24.359	5	0.00E+00	3.75E-01	0.00E+00	0.00E+00	1.41E+00	9.87E+00	9.87E+00	4
196	17.329	24.294	5	0.00E+00	1.55E-01	0.00E+00	0.00E+00	7.69E-01	5.38E+00	5.38E+00	3
197	17.350	24.467	5	0.00E+00	1.32E-01	0.00E+00	0.00E+00	4.62E-01	3.23E+00	3.23E+00	3
199	17.470	26.332	5	2.30E-06	2.67E+01	3.22E-06	8.31E-03	7.65E+01	5.36E+02	5.36E+02	8
200	17.542	26.309	5	7.95E-07	1.09E+01	1.11E-06	3.40E-03	3.11E+01	2.18E+02	2.18E+02	8
204	17.183	24.370	5	0.00E+00	2.81E-01	0.00E+00	0.00E+00	1.12E+00	7.84E+00	7.84E+00	4
206	17.314	24.187	5	0.00E+00	1.29E-01	0.00E+00	0.00E+00	9.14E-01	6.40E+00	6.40E+00	4
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-01	2.13E+00	2.13E+00	2

Table F4
VX Exposure Estimates
Support Brigade

208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-01	4.38E+00	4.38E+00	3
209	17.266	24.069	5	0.00E+00	8.44E-02	0.00E+00	0.00E+00	1.25E+00	8.75E+00	8.75E+00	4
210	17.248	24.378	5	0.00E+00	6.50E-01	0.00E+00	0.00E+00	2.41E+00	1.69E+01	1.69E+01	5
211	17.359	24.366	5	0.00E+00	8.86E-02	0.00E+00	0.00E+00	3.72E-01	2.60E+00	2.60E+00	2
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-01	2.08E+00	2.08E+00	2
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-01	5.05E+00	5.05E+00	3
235	17.540	26.653	5	3.58E-06	9.83E+00	5.01E-06	1.96E-03	2.81E+01	1.97E+02	1.97E+02	8
242	17.453	26.585	5	9.04E-07	3.25E+00	1.27E-06	7.97E-04	9.30E+00	6.51E+01	6.51E+01	7
246	17.560	26.496	5	0.00E+00	1.00E-03	0.00E+00	1.69E-06	2.87E-03	2.01E-02	2.01E-02	1
248	17.528	26.754	5	7.49E-06	1.91E+01	1.05E-05	2.40E-03	5.47E+01	3.83E+02	3.83E+02	8
253	17.471	24.264	5	0.00E+00	3.43E-01	0.00E+00	0.00E+00	1.59E+00	1.11E+01	1.11E+01	4
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.54E-01	5.98E+00	5.98E+00	3
259	17.464	24.139	5	0.00E+00	1.39E-01	0.00E+00	0.00E+00	1.22E+00	8.54E+00	8.54E+00	4
261	17.537	24.105	5	0.00E+00	9.08E-02	0.00E+00	0.00E+00	1.14E+00	7.98E+00	7.98E+00	4
262	17.535	24.181	5	0.00E+00	2.01E-01	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-01	4.38E+00	4.38E+00	3
276	17.445	23.969	5	0.00E+00	2.23E-02	0.00E+00	0.00E+00	8.23E-01	5.76E+00	5.76E+00	3
277	17.554	23.921	5	0.00E+00	6.92E-03	0.00E+00	0.00E+00	8.00E-01	5.60E+00	5.60E+00	3
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-02	2.24E-01	2.24E-01	1
281	17.580	24.093	5	0.00E+00	3.14E-02	0.00E+00	0.00E+00	5.85E-01	4.10E+00	4.10E+00	3
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E-01	4.59E+00	4.59E+00	3
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-01	5.64E+00	5.64E+00	3
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-01	3.83E+00	3.83E+00	3
289	17.538	23.994	5	0.00E+00	3.89E-02	0.00E+00	0.00E+00	1.01E+00	7.07E+00	7.07E+00	4

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected Troops 12 rounds at aimpoint (17.35, 28.20)												
3	17.181	23.524	2	1.27E-01	3.70E-01	1.78E-01	1.27E-01	3.70E-01	2.77E+00	2.95E+00	2	
8	17.462	26.876	5	6.60E+00	1.29E+02	9.24E+00	6.60E+00	1.29E+02	9.12E+02	9.21E+02	8	
9	17.366	26.775	5	5.26E+00	9.45E+01	7.36E+00	5.26E+00	9.45E+01	6.69E+02	6.76E+02	8	
11	17.742	26.629	5	1.02E+00	1.71E+01	1.43E+00	1.02E+00	1.71E+01	1.21E+02	1.23E+02	8	
13	17.460	26.751	5	4.93E+00	8.65E+01	6.90E+00	4.93E+00	8.65E+01	6.12E+02	6.19E+02	8	
48	17.187	23.651	5	1.80E-01	4.24E-01	2.52E-01	1.80E-01	4.24E-01	3.22E+00	3.47E+00	3	
49	17.468	24.443	5	6.35E-01	1.64E+00	8.89E-01	6.35E-01	1.64E+00	1.24E+01	1.33E+01	4	
50	17.487	24.398	5	5.97E-01	1.47E+00	8.36E-01	5.97E-01	1.47E+00	1.11E+01	1.20E+01	4	
52	17.293	24.340	5	5.60E-01	1.35E+00	7.84E-01	5.60E-01	1.35E+00	1.02E+01	1.10E+01	4	
53	17.202	24.669	5	7.57E-01	2.19E+00	1.06E+00	7.57E-01	2.19E+00	1.64E+01	1.74E+01	5	
54	17.418	24.675	5	8.07E-01	2.53E+00	1.13E+00	8.07E-01	2.53E+00	1.88E+01	2.00E+01	5	
55	17.339	24.697	5	8.17E-01	2.62E+00	1.14E+00	8.17E-01	2.62E+00	1.95E+01	2.06E+01	5	
56	17.274	24.597	5	7.59E-01	2.17E+00	1.06E+00	7.59E-01	2.17E+00	1.63E+01	1.73E+01	5	
57	17.347	24.131	5	4.42E-01	9.92E-01	6.19E-01	4.42E-01	9.92E-01	7.56E+00	8.18E+00	4	
58	17.336	24.001	5	3.63E-01	8.61E-01	5.08E-01	3.63E-01	8.61E-01	6.54E+00	7.04E+00	4	
59	17.205	23.842	5	3.00E-01	6.37E-01	4.20E-01	3.00E-01	6.37E-01	4.88E+00	5.30E+00	3	
60	17.421	24.329	5	5.53E-01	1.33E+00	7.74E-01	5.53E-01	1.33E+00	1.01E+01	1.09E+01	4	
61	17.701	26.488	5	3.12E+00	4.66E+01	4.37E+00	3.12E+00	4.66E+01	3.31E+02	3.35E+02	8	
62	17.464	26.662	5	4.31E+00	7.13E+01	6.03E+00	4.31E+00	7.13E+01	5.05E+02	5.11E+02	8	
68	17.659	26.754	5	4.86E+00	8.52E+01	6.80E+00	4.86E+00	8.52E+01	6.03E+02	6.10E+02	8	
69	17.555	26.861	5	6.09E+00	1.16E+02	8.53E+00	6.09E+00	1.16E+02	8.21E+02	8.29E+02	8	
71	17.598	26.569	5	4.11E+00	6.45E+01	5.75E+00	4.11E+00	6.45E+01	4.57E+02	4.63E+02	8	
72	17.445	26.254	5	2.37E+00	2.80E+01	3.32E+00	2.37E+00	2.80E+01	1.99E+02	2.03E+02	8	
73	17.815	26.257	5	9.43E-05	1.01E-01	1.32E-04	9.43E-05	1.01E-01	7.07E-01	7.07E-01	2	
74	17.693	26.866	5	7.33E+00	1.48E+02	1.03E+01	7.33E+00	1.48E+02	1.05E+03	1.06E+03	8	
75	17.678	26.639	5	4.12E+00	6.80E+01	5.77E+00	4.12E+00	6.80E+01	4.82E+02	4.88E+02	8	
76	17.409	26.724	5	5.44E+00	9.77E+01	7.62E+00	5.44E+00	9.77E+01	6.92E+02	6.99E+02	8	
77	17.784	26.491	5	1.43E-01	2.27E+00	2.00E-01	1.43E-01	2.27E+00	1.61E+01	1.63E+01	5	
82	17.332	26.414	5	2.95E+00	4.01E+01	4.13E+00	2.95E+00	4.01E+01	2.85E+02	2.89E+02	8	
84	17.736	26.324	5	9.97E-01	1.33E+01	1.40E+00	9.97E-01	1.33E+01	9.45E+01	9.59E+01	8	
86	17.487	26.466	5	3.40E+00	4.92E+01	4.76E+00	3.40E+00	4.92E+01	3.49E+02	3.54E+02	8	
93	17.348	26.251	5	2.36E+00	2.78E+01	3.30E+00	2.36E+00	2.78E+01	1.98E+02	2.01E+02	8	
94	17.418	26.441	5	3.22E+00	4.54E+01	4.51E+00	3.22E+00	4.54E+01	3.22E+02	3.27E+02	8	

Table F4
VX Exposure Estimates
Support Brigade

98	17.590	26.733	5	5.53E+00	9.96E+01	7.74E+00	5.53E+00	9.96E+01	7.05E+02	7.13E+02	8
99	17.775	26.941	5	1.08E-01	2.10E+00	1.51E-01	1.08E-01	2.10E+00	1.49E+01	1.50E+01	5
100	17.232	23.912	5	3.32E-01	7.35E-01	4.65E-01	3.32E-01	7.35E-01	5.61E+00	6.07E+00	4
101	17.439	24.597	5	7.69E-01	2.19E+00	1.08E+00	7.69E-01	2.19E+00	1.64E+01	1.75E+01	5
102	17.175	24.255	5	4.27E-01	8.93E-01	5.98E-01	4.27E-01	8.93E-01	6.85E+00	7.45E+00	4
103	17.359	24.059	5	3.97E-01	9.20E-01	5.56E-01	3.97E-01	9.20E-01	7.00E+00	7.55E+00	4
104	17.452	24.521	5	7.08E-01	1.93E+00	9.91E-01	7.08E-01	1.93E+00	1.45E+01	1.55E+01	5
105	17.223	23.804	5	2.84E-01	6.27E-01	3.98E-01	2.84E-01	6.27E-01	4.79E+00	5.18E+00	3
106	17.181	24.103	5	3.73E-01	7.57E-01	5.22E-01	3.73E-01	7.57E-01	5.82E+00	6.34E+00	4
107	17.369	24.259	5	5.12E-01	1.19E+00	7.17E-01	5.12E-01	1.19E+00	9.05E+00	9.76E+00	4
108	17.177	24.439	5	5.40E-01	1.24E+00	7.56E-01	5.40E-01	1.24E+00	9.44E+00	1.02E+01	4
109	17.196	24.503	5	6.39E-01	1.58E+00	8.95E-01	6.39E-01	1.58E+00	1.20E+01	1.28E+01	4
110	17.283	23.842	5	3.08E-01	7.16E-01	4.31E-01	3.08E-01	7.16E-01	5.44E+00	5.87E+00	3
111	17.266	23.993	5	3.59E-01	8.49E-01	5.03E-01	3.59E-01	8.49E-01	6.45E+00	6.95E+00	4
112	17.244	24.171	5	4.63E-01	1.02E+00	6.48E-01	4.63E-01	1.02E+00	7.79E+00	8.44E+00	4
113	17.262	24.275	5	5.27E-01	1.23E+00	7.38E-01	5.27E-01	1.23E+00	9.35E+00	1.01E+01	4
114	17.357	23.679	5	2.43E-01	5.77E-01	3.40E-01	2.43E-01	5.77E-01	4.38E+00	4.72E+00	3
115	17.323	24.549	5	7.20E-01	2.01E+00	1.01E+00	7.20E-01	2.01E+00	1.51E+01	1.61E+01	5
116	17.342	23.597	5	2.05E-01	5.21E-01	2.87E-01	2.05E-01	5.21E-01	3.93E+00	4.22E+00	3
117	17.349	23.785	5	2.91E-01	6.49E-01	4.07E-01	2.91E-01	6.49E-01	4.95E+00	5.36E+00	3
118	17.359	23.524	5	1.63E-01	5.11E-01	2.28E-01	1.63E-01	5.11E-01	3.81E+00	4.03E+00	3
119	17.263	24.484	5	6.76E-01	1.78E+00	9.46E-01	6.76E-01	1.78E+00	1.34E+01	1.44E+01	4
143	17.185	23.996	5	3.45E-01	6.85E-01	4.83E-01	3.45E-01	6.85E-01	5.28E+00	5.76E+00	3
158	17.797	26.587	5	2.61E-02	4.33E-01	3.65E-02	2.61E-02	4.33E-01	3.07E+00	3.10E+00	3
160	17.812	26.724	5	8.96E-05	0.00E+00	1.25E-04	8.96E-05	0.00E+00	1.25E-04	2.51E-04	1
193	17.263	23.765	5	2.75E-01	6.34E-01	3.85E-01	2.75E-01	6.34E-01	4.82E+00	5.21E+00	3
195	17.552	24.359	5	5.90E-01	1.42E+00	8.26E-01	5.90E-01	1.42E+00	1.08E+01	1.16E+01	4
196	17.329	24.294	5	5.33E-01	1.27E+00	7.46E-01	5.33E-01	1.27E+00	9.64E+00	1.04E+01	4
197	17.350	24.467	5	6.56E-01	1.74E+00	9.18E-01	6.56E-01	1.74E+00	1.31E+01	1.40E+01	4
199	17.470	26.332	5	2.68E+00	3.43E+01	3.75E+00	2.68E+00	3.43E+01	2.44E+02	2.48E+02	8
200	17.542	26.309	5	2.53E+00	3.15E+01	3.54E+00	2.53E+00	3.15E+01	2.24E+02	2.28E+02	8
203	17.342	26.573	5	3.58E+00	5.47E+01	5.01E+00	3.58E+00	5.47E+01	3.88E+02	3.93E+02	8
204	17.183	24.370	5	5.18E-01	1.13E+00	7.25E-01	5.18E-01	1.13E+00	8.64E+00	9.36E+00	4
206	17.314	24.187	5	4.50E-01	1.07E+00	6.30E-01	4.50E-01	1.07E+00	8.12E+00	8.75E+00	4
207	17.355	23.946	5	3.45E-01	8.05E-01	4.83E-01	3.45E-01	8.05E-01	6.12E+00	6.60E+00	4
208	17.275	23.609	5	2.01E-01	5.02E-01	2.81E-01	2.01E-01	5.02E-01	3.80E+00	4.08E+00	3
209	17.266	24.069	5	4.00E-01	9.30E-01	5.60E-01	4.00E-01	9.30E-01	7.07E+00	7.63E+00	4
210	17.248	24.378	5	6.00E-01	1.44E+00	8.40E-01	6.00E-01	1.44E+00	1.09E+01	1.18E+01	4
211	17.359	24.366	5	5.82E-01	1.43E+00	8.15E-01	5.82E-01	1.43E+00	1.08E+01	1.16E+01	4
212	17.355	23.859	5	3.18E-01	7.19E-01	4.45E-01	3.18E-01	7.19E-01	5.48E+00	5.92E+00	3
213	17.275	23.713	5	2.51E-01	5.94E-01	3.51E-01	2.51E-01	5.94E-01	4.51E+00	4.86E+00	3
235	17.540	26.653	5	4.17E+00	6.82E+01	5.84E+00	4.17E+00	6.82E+01	4.83E+02	4.89E+02	8
240	17.624	26.382	5	2.89E+00	3.85E+01	4.05E+00	2.89E+00	3.85E+01	2.74E+02	2.78E+02	8
241	17.803	26.836	5	9.06E-05	0.00E+00	1.27E-04	9.06E-05	0.00E+00	1.27E-04	2.54E-04	1
242	17.453	26.585	5	3.58E+00	5.45E+01	5.01E+00	3.58E+00	5.45E+01	3.87E+02	3.92E+02	8
245	17.342	26.693	5	4.41E+00	7.44E+01	6.17E+00	4.41E+00	7.44E+01	5.27E+02	5.33E+02	8
246	17.560	26.496	5	3.26E+00	4.74E+01	4.56E+00	3.26E+00	4.74E+01	3.36E+02	3.41E+02	8
247	17.618	26.228	5	2.39E+00	2.80E+01	3.35E+00	2.39E+00	2.80E+01	1.99E+02	2.03E+02	8
248	17.528	26.754	5	5.27E+00	9.41E+01	7.38E+00	5.27E+00	9.41E+01	6.66E+02	6.73E+02	8
249	17.733	26.756	5	2.15E+00	3.95E+01	3.01E+00	2.15E+00	3.95E+01	2.80E+02	2.83E+02	8
253	17.471	24.264	5	5.19E-01	1.21E+00	7.27E-01	5.19E-01	1.21E+00	9.20E+00	9.92E+00	4
254	17.479	23.766	5	2.86E-01	6.47E-01	4.00E-01	2.86E-01	6.47E-01	4.93E+00	5.33E+00	3
256	17.694	23.745	5	1.86E-01	4.25E-01	2.60E-01	1.86E-01	4.25E-01	3.24E+00	3.50E+00	3
257	17.825	23.345	5	2.99E-06	0.00E+00	4.19E-06	2.99E-06	0.00E+00	4.19E-06	8.37E-06	1
259	17.464	24.139	5	4.45E-01	1.01E+00	6.23E-01	4.45E-01	1.01E+00	7.69E+00	8.32E+00	4
260	17.671	24.255	5	4.51E-01	9.41E-01	6.31E-01	4.51E-01	9.41E-01	7.22E+00	7.85E+00	4
261	17.537	24.105	5	4.31E-01	9.78E-01	6.03E-01	4.31E-01	9.78E-01	7.45E+00	8.05E+00	4
262	17.535	24.181	5	4.77E-01	1.06E+00	6.68E-01	4.77E-01	1.06E+00	8.09E+00	8.76E+00	4
272	17.654	24.088	5	4.11E-01	8.26E-01	5.75E-01	4.11E-01	8.26E-01	6.36E+00	6.93E+00	4
274	17.554	23.728	5	2.63E-01	6.13E-01	3.68E-01	2.63E-01	6.13E-01	4.66E+00	5.03E+00	3
275	17.659	23.893	5	3.15E-01	6.39E-01	4.41E-01	3.15E-01	6.39E-01	4.91E+00	5.36E+00	3
276	17.445	23.969	5	3.56E-01	8.37E-01	4.98E-01	3.56E-01	8.37E-01	6.36E+00	6.86E+00	4
277	17.554	23.921	5	3.45E-01	7.89E-01	4.83E-01	3.45E-01	7.89E-01	6.01E+00	6.49E+00	4
278	17.752	24.260	5	1.48E-01	4.31E-01	2.07E-01	1.48E-01	4.31E-01	3.22E+00	3.43E+00	3
280	17.642	24.022	5	3.84E-01	7.99E-01	5.38E-01	3.84E-01	7.99E-01	6.13E+00	6.67E+00	4
281	17.580	24.093	5	4.11E-01	9.61E-01	5.75E-01	4.11E-01	9.61E-01	7.30E+00	7.88E+00	4
283	17.536	23.658	5	2.13E-01	5.59E-01	2.98E-01	2.13E-01	5.59E-01	4.21E+00	4.51E+00	3
284	17.455	23.844	5	3.31E-01	7.08E-01	4.63E-01	3.31E-01	7.08E-01	5.42E+00	5.88E+00	3

Table F4
VX Exposure Estimates
Support Brigade

286	17.668	23.823	5	2.68E-01	5.55E-01	3.75E-01	2.68E-01	5.55E-01	4.26E+00	4.64E+00	3
288	17.572	23.825	5	3.08E-01	6.94E-01	4.31E-01	3.08E-01	6.94E-01	5.29E+00	5.72E+00	3
289	17.538	23.994	5	3.66E-01	8.64E-01	5.12E-01	3.66E-01	8.64E-01	6.56E+00	7.07E+00	4
Case 2: Protected 12 rounds at aimpoint (17.35, 28.20)											
3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	7.42E-02	3.45E-01	2.52E+00	2.52E+00	2
8	17.462	26.876	5	1.06E-01	4.29E+01	1.48E-01	3.24E-01	1.23E+02	8.61E+02	8.62E+02	8
9	17.366	26.775	5	1.20E-01	3.15E+01	1.68E-01	3.62E-01	9.01E+01	6.31E+02	6.31E+02	8
11	17.742	26.629	5	2.49E-02	5.70E+00	3.49E-02	7.35E-02	1.63E+01	1.14E+02	1.14E+02	8
13	17.460	26.751	5	1.26E-01	2.88E+01	1.76E-01	3.75E-01	8.25E+01	5.78E+02	5.78E+02	8
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	1.17E-01	3.94E-01	2.92E+00	2.92E+00	2
49	17.468	24.443	5	1.92E-03	0.00E+00	2.69E-03	4.37E-01	1.53E+00	1.13E+01	1.13E+01	4
50	17.487	24.398	5	0.00E+00	0.00E+00	0.00E+00	4.14E-01	1.37E+00	1.02E+01	1.02E+01	4
52	17.293	24.340	5	0.00E+00	0.00E+00	0.00E+00	3.95E-01	1.25E+00	9.30E+00	9.30E+00	4
53	17.202	24.669	5	3.46E-02	0.00E+00	4.84E-02	5.09E-01	2.04E+00	1.50E+01	1.50E+01	5
54	17.418	24.675	5	3.46E-02	0.00E+00	4.84E-02	5.24E-01	2.35E+00	1.72E+01	1.72E+01	5
55	17.339	24.697	5	4.37E-02	0.00E+00	6.12E-02	5.25E-01	2.44E+00	1.78E+01	1.79E+01	5
56	17.274	24.597	5	1.18E-02	0.00E+00	1.65E-02	5.07E-01	2.02E+00	1.48E+01	1.49E+01	4
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	3.24E-01	9.22E-01	6.91E+00	6.91E+00	4
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	2.63E-01	8.01E-01	5.98E+00	5.98E+00	3
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	2.10E-01	5.92E-01	4.44E+00	4.44E+00	3
60	17.421	24.329	5	0.00E+00	0.00E+00	0.00E+00	3.90E-01	1.24E+00	9.23E+00	9.23E+00	4
61	17.701	26.488	5	1.49E-01	1.55E+01	2.09E-01	4.34E-01	4.44E+01	3.11E+02	3.12E+02	8
62	17.464	26.662	5	1.40E-01	2.38E+01	1.96E-01	4.12E-01	6.80E+01	4.77E+02	4.77E+02	8
68	17.659	26.754	5	1.24E-01	2.84E+01	1.74E-01	3.71E-01	8.12E+01	5.69E+02	5.69E+02	8
69	17.555	26.861	5	1.10E-01	3.86E+01	1.54E-01	3.36E-01	1.10E+02	7.70E+02	7.71E+02	8
71	17.598	26.569	5	1.55E-01	2.15E+01	2.17E-01	4.56E-01	6.15E+01	4.31E+02	4.31E+02	8
72	17.445	26.254	5	1.96E-01	9.27E+00	2.74E-01	5.64E-01	2.67E+01	1.88E+02	1.88E+02	8
73	17.815	26.257	5	0.00E+00	3.35E-02	0.00E+00	0.00E+00	9.59E-02	6.71E-01	6.71E-01	2
74	17.693	26.866	5	9.85E-02	4.92E+01	1.38E-01	3.07E-01	1.41E+02	9.87E+02	9.88E+02	8
75	17.678	26.639	5	1.36E-01	2.27E+01	1.90E-01	4.03E-01	6.48E+01	4.54E+02	4.54E+02	8
76	17.409	26.724	5	1.26E-01	3.26E+01	1.76E-01	3.77E-01	9.31E+01	6.52E+02	6.52E+02	8
77	17.784	26.491	5	3.14E-03	7.56E-01	4.40E-03	8.99E-03	2.16E+00	1.51E+01	1.51E+01	5
82	17.332	26.414	5	1.74E-01	1.33E+01	2.44E-01	5.04E-01	3.82E+01	2.68E+02	2.68E+02	8
84	17.736	26.324	5	6.12E-02	4.41E+00	8.57E-02	1.76E-01	1.27E+01	8.91E+01	8.92E+01	8
86	17.487	26.466	5	1.71E-01	1.64E+01	2.39E-01	4.98E-01	4.69E+01	3.29E+02	3.29E+02	8
93	17.348	26.251	5	1.94E-01	9.19E+00	2.72E-01	5.58E-01	2.65E+01	1.86E+02	1.87E+02	8
94	17.418	26.441	5	1.73E-01	1.51E+01	2.42E-01	5.02E-01	4.32E+01	3.03E+02	3.03E+02	8
98	17.590	26.733	5	1.26E-01	3.32E+01	1.76E-01	3.75E-01	9.49E+01	6.65E+02	6.65E+02	8
99	17.775	26.941	5	0.00E+00	7.00E-01	0.00E+00	5.00E-06	2.00E+00	1.40E+01	1.40E+01	4
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	2.36E-01	6.84E-01	5.12E+00	5.12E+00	3
101	17.439	24.597	5	9.97E-03	0.00E+00	1.40E-02	5.17E-01	2.04E+00	1.50E+01	1.50E+01	5
102	17.175	24.255	5	0.00E+00	0.00E+00	0.00E+00	3.10E-01	8.31E-01	6.25E+00	6.25E+00	4
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	2.89E-01	8.55E-01	6.39E+00	6.39E+00	4
104	17.452	24.521	5	5.89E-03	0.00E+00	8.25E-03	4.82E-01	1.80E+00	1.33E+01	1.33E+01	4
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	1.98E-01	5.83E-01	4.36E+00	4.36E+00	3
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	2.71E-01	7.04E-01	5.31E+00	5.31E+00	3
107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	3.69E-01	1.11E+00	8.29E+00	8.29E+00	4
108	17.177	24.439	5	2.02E-03	0.00E+00	2.83E-03	3.85E-01	1.15E+00	8.59E+00	8.59E+00	4
109	17.196	24.503	5	6.09E-03	0.00E+00	8.53E-03	4.51E-01	1.46E+00	1.09E+01	1.09E+01	4
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	2.10E-01	6.66E-01	4.96E+00	4.96E+00	3
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	2.60E-01	7.90E-01	5.89E+00	5.89E+00	3
112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	3.42E-01	9.44E-01	7.09E+00	7.09E+00	4
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	3.80E-01	1.14E+00	8.51E+00	8.51E+00	4
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	1.58E-01	5.37E-01	3.98E+00	3.98E+00	3
115	17.323	24.549	5	8.19E-03	0.00E+00	1.15E-02	4.84E-01	1.87E+00	1.38E+01	1.38E+01	4
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	1.24E-01	4.85E-01	3.57E+00	3.57E+00	3
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	2.05E-01	6.04E-01	4.52E+00	4.52E+00	3
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	8.50E-02	4.75E-01	3.44E+00	3.44E+00	3
119	17.263	24.484	5	5.07E-03	0.00E+00	7.10E-03	4.63E-01	1.65E+00	1.22E+01	1.22E+01	4
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	2.49E-01	6.37E-01	4.81E+00	4.81E+00	3
158	17.797	26.587	5	3.38E-04	1.44E-01	4.73E-04	9.67E-04	4.13E-01	2.89E+00	2.89E+00	2
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	1.85E-01	5.90E-01	4.39E+00	4.39E+00	3
195	17.552	24.359	5	0.00E+00	0.00E+00	0.00E+00	4.17E-01	1.32E+00	9.82E+00	9.82E+00	4
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	3.80E-01	1.18E+00	8.79E+00	8.79E+00	4
197	17.350	24.467	5	3.42E-03	0.00E+00	4.79E-03	4.49E-01	1.62E+00	1.20E+01	1.20E+01	4
199	17.470	26.332	5	1.86E-01	1.14E+01	2.60E-01	5.37E-01	3.27E+01	2.30E+02	2.30E+02	8
200	17.542	26.309	5	1.87E-01	1.05E+01	2.62E-01	5.39E-01	3.00E+01	2.11E+02	2.11E+02	8
203	17.342	26.573	5	1.53E-01	1.82E+01	2.14E-01	4.45E-01	5.21E+01	3.65E+02	3.66E+02	8

Table F4
VX Exposure Estimates
Support Brigade

204	17.183	24.370	5	0.00E+00	0.00E+00	0.00E+00	3.72E-01	1.05E+00	7.87E+00	7.87E+00	4
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	3.29E-01	9.93E-01	7.41E+00	7.41E+00	4
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	2.48E-01	7.49E-01	5.59E+00	5.59E+00	3
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	1.20E-01	4.67E-01	3.44E+00	3.44E+00	3
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	2.92E-01	8.65E-01	6.46E+00	6.46E+00	4
210	17.248	24.378	5	0.00E+00	0.00E+00	0.00E+00	4.22E-01	1.34E+00	9.97E+00	9.97E+00	4
211	17.359	24.366	5	0.00E+00	0.00E+00	0.00E+00	4.08E-01	1.33E+00	9.88E+00	9.88E+00	4
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	2.25E-01	6.68E-01	4.99E+00	4.99E+00	3
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	1.62E-01	5.52E-01	4.09E+00	4.09E+00	3
235	17.540	26.653	5	1.41E-01	2.27E+01	1.97E-01	4.16E-01	6.50E+01	4.56E+02	4.56E+02	8
240	17.624	26.382	5	1.80E-01	1.28E+01	2.52E-01	5.20E-01	3.67E+01	2.58E+02	2.58E+02	8
242	17.453	26.585	5	1.51E-01	1.82E+01	2.11E-01	4.41E-01	5.20E+01	3.65E+02	3.65E+02	8
245	17.342	26.693	5	1.35E-01	2.48E+01	1.89E-01	3.99E-01	7.09E+01	4.97E+02	4.97E+02	8
246	17.560	26.496	5	1.61E-01	1.58E+01	2.25E-01	4.68E-01	4.52E+01	3.17E+02	3.17E+02	8
247	17.618	26.228	5	2.03E-01	9.25E+00	2.84E-01	5.85E-01	2.66E+01	1.87E+02	1.87E+02	8
248	17.528	26.754	5	1.24E-01	3.14E+01	1.74E-01	3.70E-01	8.97E+01	6.28E+02	6.29E+02	8
249	17.733	26.756	5	3.97E-02	1.32E+01	5.56E-02	1.20E-01	3.77E+01	2.64E+02	2.64E+02	8
253	17.471	24.264	5	0.00E+00	0.00E+00	0.00E+00	3.70E-01	1.12E+00	8.36E+00	8.36E+00	4
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	1.86E-01	6.02E-01	4.47E+00	4.47E+00	3
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	1.26E-01	3.95E-01	2.94E+00	2.94E+00	2
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	3.24E-01	9.37E-01	7.01E+00	7.01E+00	4
260	17.671	24.255	5	0.00E+00	0.00E+00	0.00E+00	3.30E-01	8.75E-01	6.59E+00	6.59E+00	4
261	17.537	24.105	5	0.00E+00	0.00E+00	0.00E+00	3.15E-01	9.09E-01	6.80E+00	6.80E+00	4
262	17.535	24.181	5	0.00E+00	0.00E+00	0.00E+00	3.49E-01	9.82E-01	7.36E+00	7.36E+00	4
272	17.654	24.088	5	0.00E+00	0.00E+00	0.00E+00	2.98E-01	7.68E-01	5.79E+00	5.79E+00	3
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	1.67E-01	5.70E-01	4.22E+00	4.22E+00	3
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	2.23E-01	5.94E-01	4.47E+00	4.47E+00	3
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	2.55E-01	7.78E-01	5.80E+00	5.80E+00	3
277	17.554	23.921	5	0.00E+00	0.00E+00	0.00E+00	2.43E-01	7.34E-01	5.48E+00	5.48E+00	3
278	17.752	24.260	5	0.00E+00	0.00E+00	0.00E+00	1.02E-01	4.01E-01	2.95E+00	2.95E+00	2
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	2.75E-01	7.43E-01	5.59E+00	5.59E+00	3
281	17.580	24.093	5	0.00E+00	0.00E+00	0.00E+00	2.99E-01	8.94E-01	6.68E+00	6.68E+00	4
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	1.27E-01	5.20E-01	3.82E+00	3.82E+00	3
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	2.26E-01	6.58E-01	4.92E+00	4.92E+00	3
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	1.88E-01	5.16E-01	3.88E+00	3.88E+00	3
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	2.04E-01	6.45E-01	4.80E+00	4.80E+00	3
289	17.538	23.994	5	0.00E+00	0.00E+00	0.00E+00	2.65E-01	8.04E-01	6.00E+00	6.00E+00	3

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

Height of Release: 10m											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected Troops			24 rounds at aimpoint (17.35, 29.20)								
3	17.181	23.524	2	5.80E-01	4.14E-01	8.12E-01	5.80E-01	4.14E-01	3.71E+00	4.52E+00	3
8	17.462	26.876	5	3.92E+00	3.46E+01	5.49E+00	3.92E+00	3.46E+01	2.48E+02	2.53E+02	8
9	17.366	26.775	5	3.65E+00	2.87E+01	5.11E+00	3.65E+00	2.87E+01	2.06E+02	2.11E+02	8
11	17.742	26.629	5	1.16E+00	8.50E+00	1.62E+00	1.16E+00	8.50E+00	6.11E+01	6.27E+01	7
13	17.460	26.751	5	3.59E+00	2.76E+01	5.03E+00	3.59E+00	2.76E+01	1.98E+02	2.03E+02	8
48	17.187	23.651	5	6.86E-01	4.90E-01	9.60E-01	6.86E-01	4.90E-01	4.39E+00	5.35E+00	3
49	17.468	24.443	5	1.43E+00	1.13E+00	2.00E+00	1.43E+00	1.13E+00	9.91E+00	1.19E+01	4
50	17.487	24.398	5	1.40E+00	1.06E+00	1.96E+00	1.40E+00	1.06E+00	9.38E+00	1.13E+01	4
52	17.293	24.340	5	1.35E+00	1.04E+00	1.89E+00	1.35E+00	1.04E+00	9.17E+00	1.11E+01	4
53	17.202	24.669	5	1.40E+00	1.18E+00	1.96E+00	1.40E+00	1.18E+00	1.02E+01	1.22E+01	4
54	17.418	24.675	5	1.58E+00	1.38E+00	2.21E+00	1.58E+00	1.38E+00	1.19E+01	1.41E+01	4
55	17.339	24.697	5	1.59E+00	1.42E+00	2.23E+00	1.59E+00	1.42E+00	1.22E+01	1.44E+01	4
56	17.274	24.597	5	1.52E+00	1.24E+00	2.13E+00	1.52E+00	1.24E+00	1.08E+01	1.29E+01	4
57	17.347	24.131	5	1.21E+00	9.93E-01	1.69E+00	1.21E+00	9.93E-01	8.65E+00	1.03E+01	4
58	17.336	24.001	5	1.11E+00	9.44E-01	1.55E+00	1.11E+00	9.44E-01	8.16E+00	9.72E+00	4
59	17.205	23.842	5	9.14E-01	6.72E-01	1.28E+00	9.14E-01	6.72E-01	5.98E+00	7.26E+00	4
60	17.421	24.329	5	1.35E+00	1.05E+00	1.89E+00	1.35E+00	1.05E+00	9.24E+00	1.11E+01	4
61	17.701	26.488	5	2.22E+00	1.30E+01	3.11E+00	2.22E+00	1.30E+01	9.41E+01	9.72E+01	8
62	17.464	26.662	5	3.39E+00	2.40E+01	4.75E+00	3.39E+00	2.40E+01	1.73E+02	1.77E+02	8
68	17.659	26.754	5	3.37E+00	2.58E+01	4.72E+00	3.37E+00	2.58E+01	1.85E+02	1.90E+02	8

Table F4
VX Exposure Estimates
Support Brigade

69	17.555	26.861	5	3.84E+00	3.33E+01	5.38E+00	3.84E+00	3.33E+01	2.38E+02	2.44E+02	8
71	17.598	26.569	5	3.25E+00	2.08E+01	4.55E+00	3.25E+00	2.08E+01	1.50E+02	1.55E+02	8
72	17.445	26.254	5	2.63E+00	1.18E+01	3.68E+00	2.63E+00	1.18E+01	8.63E+01	9.00E+01	8
73	17.815	26.257	5	6.66E-02	5.82E-01	9.32E-02	6.66E-02	5.82E-01	4.17E+00	4.26E+00	3
74	17.693	26.866	5	3.23E+00	2.82E+01	4.52E+00	3.23E+00	2.82E+01	2.02E+02	2.06E+02	8
75	17.678	26.639	5	2.86E+00	1.95E+01	4.00E+00	2.86E+00	1.95E+01	1.41E+02	1.45E+02	8
76	17.409	26.724	5	3.61E+00	2.70E+01	5.05E+00	3.61E+00	2.70E+01	1.94E+02	1.99E+02	8
77	17.784	26.491	5	3.26E-01	2.46E+00	4.56E-01	3.26E-01	2.46E+00	1.77E+01	1.81E+01	5
78	17.875	26.374	5	1.20E-05	0.00E+00	1.68E-05	1.20E-05	0.00E+00	1.68E-05	3.36E-05	1
81	17.870	26.656	5	1.33E-05	0.00E+00	1.86E-05	1.33E-05	0.00E+00	1.86E-05	3.72E-05	1
82	17.332	26.414	5	2.87E+00	1.56E+01	4.02E+00	2.87E+00	1.56E+01	1.13E+02	1.17E+02	8
84	17.736	26.324	5	1.13E+00	5.88E+00	1.58E+00	1.13E+00	5.88E+00	4.27E+01	4.43E+01	6
86	17.487	26.466	5	3.01E+00	1.73E+01	4.21E+00	3.01E+00	1.73E+01	1.25E+02	1.30E+02	8
93	17.348	26.251	5	2.62E+00	1.18E+01	3.67E+00	2.62E+00	1.18E+01	8.63E+01	8.99E+01	8
94	17.418	26.441	5	2.94E+00	1.65E+01	4.12E+00	2.94E+00	1.65E+01	1.20E+02	1.24E+02	8
98	17.590	26.733	5	3.62E+00	2.74E+01	5.07E+00	3.62E+00	2.74E+01	1.97E+02	2.02E+02	8
99	17.775	26.941	5	4.97E-01	5.29E+00	6.96E-01	4.97E-01	5.29E+00	3.77E+01	3.84E+01	6
100	17.232	23.912	5	9.86E-01	7.88E-01	1.38E+00	9.86E-01	7.88E-01	6.90E+00	8.28E+00	4
101	17.439	24.597	5	1.54E+00	1.26E+00	2.16E+00	1.54E+00	1.26E+00	1.10E+01	1.31E+01	4
102	17.175	24.255	5	9.93E-01	7.53E-01	1.39E+00	9.93E-01	7.53E-01	6.66E+00	8.05E+00	4
103	17.359	24.059	5	1.15E+00	9.65E-01	1.61E+00	1.15E+00	9.65E-01	8.37E+00	9.98E+00	4
104	17.452	24.521	5	1.48E+00	1.21E+00	2.07E+00	1.48E+00	1.21E+00	1.05E+01	1.26E+01	4
105	17.223	23.804	5	8.97E-01	6.93E-01	1.26E+00	8.97E-01	6.93E-01	6.11E+00	7.36E+00	4
106	17.181	24.103	5	9.51E-01	7.35E-01	1.33E+00	9.51E-01	7.35E-01	6.48E+00	7.81E+00	4
107	17.369	24.259	5	1.30E+00	1.04E+00	1.82E+00	1.30E+00	1.04E+00	9.10E+00	1.09E+01	4
108	17.177	24.439	5	1.10E+00	8.14E-01	1.54E+00	1.10E+00	8.14E-01	7.24E+00	8.78E+00	4
109	17.196	24.503	5	1.27E+00	9.48E-01	1.78E+00	1.27E+00	9.48E-01	8.41E+00	1.02E+01	4
110	17.283	23.842	5	9.83E-01	7.99E-01	1.38E+00	9.83E-01	7.99E-01	6.97E+00	8.35E+00	4
111	17.266	23.993	5	1.09E+00	9.02E-01	1.53E+00	1.09E+00	9.02E-01	7.84E+00	9.37E+00	4
112	17.244	24.171	5	1.22E+00	9.51E-01	1.71E+00	1.22E+00	9.51E-01	8.37E+00	1.01E+01	4
113	17.262	24.275	5	1.31E+00	1.02E+00	1.83E+00	1.31E+00	1.02E+00	8.97E+00	1.08E+01	4
114	17.357	23.679	5	8.17E-01	7.09E-01	1.14E+00	8.17E-01	7.09E-01	6.11E+00	7.25E+00	4
115	17.323	24.549	5	1.50E+00	1.21E+00	2.10E+00	1.50E+00	1.21E+00	1.06E+01	1.27E+01	4
116	17.342	23.597	5	7.62E-01	6.43E-01	1.07E+00	7.62E-01	6.43E-01	5.57E+00	6.63E+00	4
117	17.349	23.785	5	8.83E-01	7.97E-01	1.24E+00	8.83E-01	7.97E-01	6.82E+00	8.05E+00	4
118	17.359	23.524	5	7.00E-01	5.81E-01	9.80E-01	7.00E-01	5.81E-01	5.05E+00	6.03E+00	4
119	17.263	24.484	5	1.45E+00	1.14E+00	2.03E+00	1.45E+00	1.14E+00	1.00E+01	1.20E+01	4
143	17.185	23.996	5	9.15E-01	7.11E-01	1.28E+00	9.15E-01	7.11E-01	6.26E+00	7.54E+00	4
158	17.797	26.587	5	1.21E-01	1.30E+00	1.69E-01	1.21E-01	1.30E+00	9.27E+00	9.44E+00	4
160	17.812	26.724	5	4.60E-02	6.65E-01	6.44E-02	4.60E-02	6.65E-01	4.72E+00	4.78E+00	3
169	17.864	26.943	5	9.82E-06	0.00E+00	1.37E-05	9.82E-06	0.00E+00	1.37E-05	2.75E-05	1
193	17.263	23.765	5	8.95E-01	7.39E-01	1.25E+00	8.95E-01	7.39E-01	6.43E+00	7.68E+00	4
195	17.552	24.359	5	1.37E+00	1.10E+00	1.92E+00	1.37E+00	1.10E+00	9.62E+00	1.15E+01	4
196	17.329	24.294	5	1.32E+00	1.05E+00	1.85E+00	1.32E+00	1.05E+00	9.20E+00	1.10E+01	4
197	17.350	24.467	5	1.44E+00	1.17E+00	2.02E+00	1.44E+00	1.17E+00	1.02E+01	1.22E+01	4
199	17.470	26.332	5	2.75E+00	1.36E+01	3.85E+00	2.75E+00	1.36E+01	9.91E+01	1.03E+02	8
200	17.542	26.309	5	2.71E+00	1.31E+01	3.79E+00	2.71E+00	1.31E+01	9.55E+01	9.93E+01	8
203	17.342	26.573	5	3.19E+00	2.05E+01	4.47E+00	3.19E+00	2.05E+01	1.48E+02	1.52E+02	8
204	17.183	24.370	5	1.11E+00	8.00E-01	1.55E+00	1.11E+00	8.00E-01	7.15E+00	8.71E+00	4
206	17.314	24.187	5	1.25E+00	1.02E+00	1.75E+00	1.25E+00	1.02E+00	8.89E+00	1.06E+01	4
207	17.355	23.946	5	1.05E+00	9.04E-01	1.47E+00	1.05E+00	9.04E-01	7.80E+00	9.27E+00	4
208	17.275	23.609	5	7.73E-01	6.18E-01	1.08E+00	7.73E-01	6.18E-01	5.41E+00	6.49E+00	4
209	17.266	24.069	5	1.15E+00	9.38E-01	1.61E+00	1.15E+00	9.38E-01	8.18E+00	9.79E+00	4
210	17.248	24.378	5	1.37E+00	1.06E+00	1.92E+00	1.37E+00	1.06E+00	9.34E+00	1.13E+01	4
211	17.359	24.366	5	1.37E+00	1.09E+00	1.92E+00	1.37E+00	1.09E+00	9.55E+00	1.15E+01	4
212	17.355	23.859	5	9.58E-01	8.45E-01	1.34E+00	9.58E-01	8.45E-01	7.26E+00	8.60E+00	4
213	17.275	23.713	5	8.64E-01	6.97E-01	1.21E+00	8.64E-01	6.97E-01	6.09E+00	7.30E+00	4
235	17.540	26.653	5	3.35E+00	2.36E+01	4.69E+00	3.35E+00	2.36E+01	1.70E+02	1.75E+02	8
240	17.624	26.382	5	2.79E+00	1.43E+01	3.91E+00	2.79E+00	1.43E+01	1.04E+02	1.08E+02	8
241	17.803	26.836	5	4.75E-02	7.24E-01	6.65E-02	4.75E-02	7.24E-01	5.13E+00	5.20E+00	3
242	17.453	26.585	5	3.19E+00	2.09E+01	4.47E+00	3.19E+00	2.09E+01	1.51E+02	1.55E+02	8
244	17.886	26.503	5	6.69E-06	0.00E+00	9.37E-06	6.69E-06	0.00E+00	9.37E-06	1.87E-05	1
245	17.342	26.693	5	3.44E+00	2.51E+01	4.82E+00	3.44E+00	2.51E+01	1.81E+02	1.85E+02	8
246	17.560	26.496	5	3.03E+00	1.82E+01	4.24E+00	3.03E+00	1.82E+01	1.32E+02	1.36E+02	8
247	17.618	26.228	5	2.56E+00	1.10E+01	3.58E+00	2.56E+00	1.10E+01	8.06E+01	8.42E+01	8
248	17.528	26.754	5	3.62E+00	2.79E+01	5.07E+00	3.62E+00	2.79E+01	2.00E+02	2.05E+02	8
249	17.733	26.756	5	1.57E+00	1.27E+01	2.20E+00	1.57E+00	1.27E+01	9.11E+01	9.33E+01	8
253	17.471	24.264	5	1.31E+00	1.05E+00	1.83E+00	1.31E+00	1.05E+00	9.18E+00	1.10E+01	4

Table F4
VX Exposure Estimates
Support Brigade

254	17.479	23.766	5	8.96E-01	7.63E-01	1.25E+00	8.96E-01	7.63E-01	6.60E+00	7.85E+00	4
256	17.694	23.745	5	6.21E-01	4.80E-01	8.69E-01	6.21E-01	4.80E-01	4.23E+00	5.10E+00	3
257	17.825	23.345	5	5.66E-03	0.00E+00	7.92E-03	5.66E-03	0.00E+00	7.92E-03	1.58E-02	1
259	17.464	24.139	5	1.22E+00	9.99E-01	1.71E+00	1.22E+00	9.99E-01	8.70E+00	1.04E+01	4
260	17.671	24.255	5	1.03E+00	7.84E-01	1.44E+00	1.03E+00	7.84E-01	6.93E+00	8.37E+00	4
261	17.537	24.105	5	1.19E+00	9.86E-01	1.67E+00	1.19E+00	9.86E-01	8.57E+00	1.02E+01	4
262	17.535	24.181	5	1.24E+00	1.02E+00	1.74E+00	1.24E+00	1.02E+00	8.88E+00	1.06E+01	4
272	17.654	24.088	5	1.04E+00	7.99E-01	1.46E+00	1.04E+00	7.99E-01	7.05E+00	8.51E+00	4
274	17.554	23.728	5	8.66E-01	7.48E-01	1.21E+00	8.66E-01	7.48E-01	6.45E+00	7.66E+00	4
275	17.659	23.893	5	8.81E-01	6.91E-01	1.23E+00	8.81E-01	6.91E-01	6.07E+00	7.30E+00	4
276	17.445	23.969	5	1.07E+00	9.15E-01	1.50E+00	1.07E+00	9.15E-01	7.90E+00	9.40E+00	4
277	17.554	23.921	5	1.03E+00	8.85E-01	1.44E+00	1.03E+00	8.85E-01	7.64E+00	9.08E+00	4
278	17.752	24.260	5	4.56E-01	4.07E-01	6.38E-01	4.56E-01	4.07E-01	3.49E+00	4.13E+00	3
280	17.642	24.022	5	1.04E+00	8.10E-01	1.46E+00	1.04E+00	8.10E-01	7.13E+00	8.58E+00	4
281	17.580	24.093	5	1.18E+00	9.60E-01	1.65E+00	1.18E+00	9.60E-01	8.37E+00	1.00E+01	4
283	17.536	23.658	5	8.05E-01	6.71E-01	1.13E+00	8.05E-01	6.71E-01	5.82E+00	6.95E+00	4
284	17.455	23.844	5	9.49E-01	8.41E-01	1.33E+00	9.49E-01	8.41E-01	7.22E+00	8.54E+00	4
286	17.668	23.823	5	7.86E-01	6.21E-01	1.10E+00	7.86E-01	6.21E-01	5.45E+00	6.55E+00	4
288	17.572	23.825	5	9.56E-01	8.03E-01	1.34E+00	9.56E-01	8.03E-01	6.96E+00	8.30E+00	4
289	17.538	23.994	5	1.10E+00	9.31E-01	1.54E+00	1.10E+00	9.31E-01	8.06E+00	9.60E+00	4

Case 2: Protected 24 rounds at aimpoint (17.35, 29.20)

3	17.181	23.524	2	0.00E+00	0.00E+00	0.00E+00	4.92E-01	3.85E-01	3.38E+00	3.38E+00	3
8	17.462	26.876	5	5.10E-01	1.13E+01	7.14E-01	1.47E+00	3.29E+01	2.32E+02	2.33E+02	8
9	17.366	26.775	5	5.34E-01	9.30E+00	7.48E-01	1.53E+00	2.73E+01	1.93E+02	1.94E+02	8
11	17.742	26.629	5	1.76E-01	2.72E+00	2.46E-01	5.04E-01	8.10E+00	5.74E+01	5.77E+01	7
13	17.460	26.751	5	5.31E-01	8.94E+00	7.43E-01	1.53E+00	2.63E+01	1.86E+02	1.87E+02	8
48	17.187	23.651	5	0.00E+00	0.00E+00	0.00E+00	5.81E-01	4.55E-01	4.00E+00	4.00E+00	3
49	17.468	24.443	5	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.05E+00	9.02E+00	9.02E+00	4
50	17.487	24.398	5	0.00E+00	0.00E+00	0.00E+00	1.17E+00	9.86E-01	8.54E+00	8.54E+00	4
52	17.293	24.340	5	0.00E+00	0.00E+00	0.00E+00	1.13E+00	9.66E-01	8.34E+00	8.34E+00	4
53	17.202	24.669	5	0.00E+00	0.00E+00	0.00E+00	1.18E+00	1.10E+00	9.35E+00	9.35E+00	4
54	17.418	24.675	5	0.00E+00	0.00E+00	0.00E+00	1.32E+00	1.28E+00	1.08E+01	1.08E+01	4
55	17.339	24.697	5	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.32E+00	1.11E+01	1.11E+01	4
56	17.274	24.597	5	0.00E+00	0.00E+00	0.00E+00	1.28E+00	1.16E+00	9.91E+00	9.91E+00	4
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	9.99E-01	9.23E-01	7.86E+00	7.86E+00	4
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	9.06E-01	8.78E-01	7.41E+00	7.41E+00	4
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	7.64E-01	6.25E-01	5.44E+00	5.44E+00	3
60	17.421	24.329	5	0.00E+00	0.00E+00	0.00E+00	1.12E+00	9.79E-01	8.42E+00	8.42E+00	4
61	17.701	26.488	5	4.09E-01	3.99E+00	5.73E-01	1.18E+00	1.24E+01	8.85E+01	8.90E+01	8
62	17.464	26.662	5	5.40E-01	7.70E+00	7.56E-01	1.55E+00	2.28E+01	1.62E+02	1.63E+02	8
68	17.659	26.754	5	5.09E-01	8.34E+00	7.13E-01	1.46E+00	2.45E+01	1.74E+02	1.74E+02	8
69	17.555	26.861	5	5.12E-01	1.09E+01	7.17E-01	1.47E+00	3.17E+01	2.24E+02	2.25E+02	8
71	17.598	26.569	5	5.61E-01	6.53E+00	7.85E-01	1.61E+00	1.98E+01	1.41E+02	1.42E+02	8
72	17.445	26.254	5	5.18E-01	2.63E+00	7.25E-01	1.58E+00	1.12E+01	8.06E+01	8.13E+01	8
73	17.815	26.257	5	4.51E-03	1.34E-01	6.31E-03	1.57E-02	5.51E-01	3.88E+00	3.89E+00	3
74	17.693	26.866	5	4.34E-01	9.20E+00	6.08E-01	1.25E+00	2.68E+01	1.89E+02	1.90E+02	8
75	17.678	26.639	5	4.74E-01	6.23E+00	6.64E-01	1.36E+00	1.85E+01	1.31E+02	1.32E+02	8
76	17.409	26.724	5	5.50E-01	8.73E+00	7.70E-01	1.58E+00	2.57E+01	1.82E+02	1.83E+02	8
77	17.784	26.491	5	4.63E-02	7.52E-01	6.48E-02	1.32E-01	2.34E+00	1.66E+01	1.66E+01	5
82	17.332	26.414	5	5.44E-01	4.52E+00	7.62E-01	1.57E+00	1.48E+01	1.06E+02	1.07E+02	8
84	17.736	26.324	5	2.16E-01	1.55E+00	3.02E-01	6.40E-01	5.58E+00	4.00E+01	4.03E+01	6
86	17.487	26.466	5	5.51E-01	5.18E+00	7.71E-01	1.59E+00	1.64E+01	1.17E+02	1.18E+02	8
93	17.348	26.251	5	5.20E-01	2.60E+00	7.28E-01	1.58E+00	1.11E+01	7.99E+01	8.06E+01	8
94	17.418	26.441	5	5.48E-01	4.87E+00	7.67E-01	1.58E+00	1.57E+01	1.12E+02	1.13E+02	8
98	17.590	26.733	5	5.51E-01	8.84E+00	7.71E-01	1.58E+00	2.61E+01	1.85E+02	1.86E+02	8
99	17.775	26.941	5	4.68E-02	1.73E+00	6.55E-02	1.34E-01	5.04E+00	3.55E+01	3.55E+01	6
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	8.23E-01	7.33E-01	6.28E+00	6.28E+00	4
101	17.439	24.597	5	0.00E+00	0.00E+00	0.00E+00	1.28E+00	1.17E+00	9.98E+00	9.98E+00	4
102	17.175	24.255	5	0.00E+00	0.00E+00	0.00E+00	8.35E-01	7.00E-01	6.07E+00	6.07E+00	4
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	9.47E-01	8.98E-01	7.61E+00	7.61E+00	4
104	17.452	24.521	5	0.00E+00	0.00E+00	0.00E+00	1.24E+00	1.12E+00	9.58E+00	9.58E+00	4
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	7.47E-01	6.45E-01	5.56E+00	5.56E+00	3
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	7.98E-01	6.83E-01	5.90E+00	5.90E+00	3
107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	1.08E+00	9.69E-01	8.30E+00	8.30E+00	4
108	17.177	24.439	5	0.00E+00	0.00E+00	0.00E+00	9.31E-01	7.57E-01	6.60E+00	6.60E+00	4
109	17.196	24.503	5	0.00E+00	0.00E+00	0.00E+00	1.07E+00	8.81E-01	7.67E+00	7.67E+00	4
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	8.17E-01	7.43E-01	6.34E+00	6.34E+00	4
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	9.01E-01	8.39E-01	7.13E+00	7.13E+00	4

Table F4
VX Exposure Estimates
Support Brigade

112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	1.01E+00	8.84E-01	7.60E+00	7.60E+00	4
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	1.09E+00	9.49E-01	8.17E+00	8.17E+00	4
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	6.74E-01	6.59E-01	5.56E+00	5.56E+00	3
115	17.323	24.549	5	0.00E+00	0.00E+00	0.00E+00	1.25E+00	1.13E+00	9.66E+00	9.66E+00	4
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	6.28E-01	5.98E-01	5.07E+00	5.07E+00	3
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	7.30E-01	7.41E-01	6.21E+00	6.21E+00	4
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	5.81E-01	5.40E-01	4.59E+00	4.59E+00	3
119	17.263	24.484	5	0.00E+00	0.00E+00	0.00E+00	1.21E+00	1.06E+00	9.11E+00	9.11E+00	4
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	7.70E-01	6.61E-01	5.71E+00	5.71E+00	3
158	17.797	26.587	5	8.19E-03	4.08E-01	1.15E-02	2.34E-02	1.23E+00	8.64E+00	8.65E+00	4
160	17.812	26.724	5	0.00E+00	2.13E-01	0.00E+00	0.00E+00	6.34E-01	4.44E+00	4.44E+00	3
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	7.43E-01	6.87E-01	5.85E+00	5.85E+00	3
195	17.552	24.359	5	0.00E+00	0.00E+00	0.00E+00	1.13E+00	1.02E+00	8.72E+00	8.72E+00	4
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.80E-01	8.40E+00	8.40E+00	4
197	17.350	24.467	5	0.00E+00	0.00E+00	0.00E+00	1.20E+00	1.09E+00	9.31E+00	9.31E+00	4
199	17.470	26.332	5	5.32E-01	3.55E+00	7.45E-01	1.58E+00	1.29E+01	9.25E+01	9.33E+01	8
200	17.542	26.309	5	5.26E-01	3.27E+00	7.36E-01	1.58E+00	1.24E+01	8.90E+01	8.97E+01	8
203	17.342	26.573	5	5.43E-01	6.45E+00	7.60E-01	1.56E+00	1.95E+01	1.39E+02	1.39E+02	8
204	17.183	24.370	5	0.00E+00	0.00E+00	0.00E+00	9.36E-01	7.44E-01	6.52E+00	6.52E+00	4
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	1.04E+00	9.51E-01	8.11E+00	8.11E+00	4
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	8.59E-01	8.41E-01	7.09E+00	7.09E+00	4
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	6.43E-01	5.75E-01	4.93E+00	4.93E+00	3
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	9.53E-01	8.72E-01	7.44E+00	7.44E+00	4
210	17.248	24.378	5	0.00E+00	0.00E+00	0.00E+00	1.14E+00	9.86E-01	8.50E+00	8.50E+00	4
211	17.359	24.366	5	0.00E+00	0.00E+00	0.00E+00	1.14E+00	1.01E+00	8.67E+00	8.67E+00	4
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	7.89E-01	7.86E-01	6.61E+00	6.61E+00	4
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	7.19E-01	6.49E-01	5.55E+00	5.55E+00	3
235	17.540	26.653	5	5.41E-01	7.55E+00	7.57E-01	1.55E+00	2.25E+01	1.60E+02	1.60E+02	8
240	17.624	26.382	5	5.41E-01	4.03E+00	7.57E-01	1.58E+00	1.36E+01	9.74E+01	9.82E+01	8
241	17.803	26.836	5	0.00E+00	2.35E-01	0.00E+00	0.00E+00	6.90E-01	4.83E+00	4.83E+00	3
242	17.453	26.585	5	5.39E-01	6.62E+00	7.55E-01	1.55E+00	1.99E+01	1.41E+02	1.42E+02	8
245	17.342	26.693	5	5.36E-01	8.09E+00	7.50E-01	1.54E+00	2.39E+01	1.69E+02	1.70E+02	8
246	17.560	26.496	5	5.44E-01	5.53E+00	7.62E-01	1.57E+00	1.73E+01	1.23E+02	1.24E+02	8
247	17.618	26.228	5	5.09E-01	2.29E+00	7.13E-01	1.58E+00	1.03E+01	7.43E+01	7.50E+01	8
248	17.528	26.754	5	5.40E-01	9.02E+00	7.56E-01	1.55E+00	2.66E+01	1.88E+02	1.89E+02	8
249	17.733	26.756	5	2.22E-01	4.10E+00	3.11E-01	6.35E-01	1.21E+01	8.56E+01	8.59E+01	8
253	17.471	24.264	5	0.00E+00	0.00E+00	0.00E+00	1.09E+00	9.74E-01	8.34E+00	8.34E+00	4
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	7.45E-01	7.09E-01	6.01E+00	6.01E+00	4
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	5.14E-01	4.46E-01	3.84E+00	3.84E+00	3
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	5.26E-03	0.00E+00	7.36E-03	7.36E-03	1
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	1.01E+00	9.29E-01	7.92E+00	7.92E+00	4
260	17.671	24.255	5	0.00E+00	0.00E+00	0.00E+00	8.60E-01	7.29E-01	6.31E+00	6.31E+00	4
261	17.537	24.105	5	0.00E+00	0.00E+00	0.00E+00	9.85E-01	9.17E-01	7.80E+00	7.80E+00	4
262	17.535	24.181	5	0.00E+00	0.00E+00	0.00E+00	1.03E+00	9.52E-01	8.11E+00	8.11E+00	4
272	17.654	24.088	5	0.00E+00	0.00E+00	0.00E+00	8.69E-01	7.43E-01	6.42E+00	6.42E+00	4
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	7.07E-01	6.96E-01	5.86E+00	5.86E+00	3
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	7.37E-01	6.42E-01	5.53E+00	5.53E+00	3
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	8.90E-01	8.51E-01	7.20E+00	7.20E+00	4
277	17.554	23.921	5	0.00E+00	0.00E+00	0.00E+00	8.52E-01	8.23E-01	6.95E+00	6.95E+00	4
278	17.752	24.260	5	0.00E+00	0.00E+00	0.00E+00	3.76E-01	3.79E-01	3.18E+00	3.18E+00	3
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	8.70E-01	7.53E-01	6.49E+00	6.49E+00	4
281	17.580	24.093	5	0.00E+00	0.00E+00	0.00E+00	9.78E-01	8.93E-01	7.62E+00	7.62E+00	4
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	6.63E-01	6.24E-01	5.30E+00	5.30E+00	3
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	7.86E-01	7.82E-01	6.57E+00	6.57E+00	4
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	6.57E-01	5.77E-01	4.96E+00	4.96E+00	3
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	7.87E-01	7.47E-01	6.33E+00	6.33E+00	4
289	17.538	23.994	5	0.00E+00	0.00E+00	0.00E+00	9.12E-01	8.66E-01	7.34E+00	7.34E+00	4

VX 250kg TBM
Light Attack
Height of Release: 500m

Weight of Released Agent											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	
Case 1: Unprotected Troops			1 round at aimpoint (16.80, 30.00)								

Table F4
VX Exposure Estimates
Support Brigade

3	17.181	23.524	2	1.78E-01	3.60E+00	2.49E-01	1.78E-01	3.60E+00	2.54E+01	2.57E+01	5
5	16.903	27.198	3	1.44E+00	6.35E+01	2.02E+00	1.44E+00	6.35E+01	4.47E+02	4.49E+02	8
7	16.933	27.851	5	6.36E-01	2.07E+01	8.90E-01	6.36E-01	2.07E+01	1.46E+02	1.47E+02	8
48	17.187	23.651	5	1.67E-01	3.24E+00	2.34E-01	1.67E-01	3.24E+00	2.29E+01	2.31E+01	5
50	17.487	24.398	5	2.45E-08	0.00E+00	3.43E-08	2.45E-08	0.00E+00	3.43E-08	6.86E-08	1
52	17.293	24.340	5	1.46E-02	1.03E-01	2.04E-02	1.46E-02	1.03E-01	7.41E-01	7.62E-01	2
53	17.202	24.669	5	1.07E-01	1.53E+00	1.50E-01	1.07E-01	1.53E+00	1.09E+01	1.10E+01	4
55	17.339	24.697	5	4.21E-05	0.00E+00	5.89E-05	4.21E-05	0.00E+00	5.89E-05	1.18E-04	1
56	17.274	24.597	5	2.97E-02	2.62E-01	4.16E-02	2.97E-02	2.62E-01	1.88E+00	1.92E+00	2
57	17.347	24.131	5	1.42E-02	4.16E-03	1.99E-02	1.42E-02	4.16E-03	4.90E-02	6.89E-02	1
58	17.336	24.001	5	2.54E-02	5.60E-02	3.56E-02	2.54E-02	5.60E-02	4.28E-01	4.63E-01	2
59	17.205	23.842	5	1.36E-01	2.39E+00	1.90E-01	1.36E-01	2.39E+00	1.69E+01	1.71E+01	5
60	17.421	24.329	5	5.28E-06	0.00E+00	7.39E-06	5.28E-06	0.00E+00	7.39E-06	1.48E-05	1
100	17.232	23.912	5	1.10E-01	1.58E+00	1.54E-01	1.10E-01	1.58E+00	1.12E+01	1.14E+01	4
102	17.175	24.255	5	1.70E-01	3.23E+00	2.38E-01	1.70E-01	3.23E+00	2.28E+01	2.31E+01	5
103	17.359	24.059	5	1.39E-02	0.00E+00	1.95E-02	1.39E-02	0.00E+00	1.95E-02	3.89E-02	1
105	17.223	23.804	5	1.22E-01	1.91E+00	1.71E-01	1.22E-01	1.91E+00	1.35E+01	1.37E+01	4
106	17.181	24.103	5	1.64E-01	3.14E+00	2.30E-01	1.64E-01	3.14E+00	2.22E+01	2.24E+01	5
107	17.369	24.259	5	4.36E-03	0.00E+00	6.10E-03	4.36E-03	0.00E+00	6.10E-03	1.22E-02	1
108	17.177	24.439	5	1.60E-01	2.89E+00	2.24E-01	1.60E-01	2.89E+00	2.05E+01	2.07E+01	5
109	17.196	24.503	5	1.26E-01	1.98E+00	1.76E-01	1.26E-01	1.98E+00	1.40E+01	1.42E+01	4
110	17.283	23.842	5	6.98E-02	5.86E-01	9.77E-02	6.98E-02	5.86E-01	4.20E+00	4.30E+00	3
111	17.266	23.993	5	7.31E-02	7.82E-01	1.02E-01	7.31E-02	7.82E-01	5.58E+00	5.68E+00	3
112	17.244	24.171	5	8.42E-02	1.02E+00	1.18E-01	8.42E-02	1.02E+00	7.26E+00	7.38E+00	4
113	17.262	24.275	5	5.71E-02	5.94E-01	7.99E-02	5.71E-02	5.94E-01	4.24E+00	4.32E+00	3
114	17.357	23.679	5	3.08E-02	0.00E+00	4.31E-02	3.08E-02	0.00E+00	4.31E-02	8.62E-02	1
115	17.323	24.549	5	5.93E-05	0.00E+00	8.30E-05	5.93E-05	0.00E+00	8.30E-05	1.66E-04	1
116	17.342	23.597	5	4.61E-02	6.73E-02	6.45E-02	4.61E-02	6.73E-02	5.36E-01	6.00E-01	2
117	17.349	23.785	5	3.11E-02	6.91E-03	4.35E-02	3.11E-02	6.91E-03	9.19E-02	1.35E-01	1
118	17.359	23.524	5	3.31E-02	0.00E+00	4.63E-02	3.31E-02	0.00E+00	4.63E-02	9.27E-02	1
119	17.263	24.484	5	4.50E-02	4.55E-01	6.30E-02	4.50E-02	4.55E-01	3.25E+00	3.31E+00	3
143	17.185	23.996	5	1.61E-01	3.07E+00	2.25E-01	1.61E-01	3.07E+00	2.17E+01	2.19E+01	5
152	16.665	27.318	5	9.85E-01	3.55E+01	1.38E+00	9.85E-01	3.55E+01	2.50E+02	2.51E+02	8
155	16.806	27.290	5	3.10E+00	1.40E+02	4.34E+00	3.10E+00	1.40E+02	9.84E+02	9.89E+02	8
156	16.694	27.671	5	1.09E+00	4.96E+01	1.53E+00	1.09E+00	4.96E+01	3.49E+02	3.50E+02	8
157	16.339	27.501	5	2.78E-06	0.00E+00	3.89E-06	2.78E-06	0.00E+00	3.89E-06	7.78E-06	1
159	16.429	27.796	5	9.72E-06	0.00E+00	1.36E-05	9.72E-06	0.00E+00	1.36E-05	2.72E-05	1
161	16.602	27.614	5	1.06E-01	2.65E+00	1.48E-01	1.06E-01	2.65E+00	1.87E+01	1.88E+01	5
162	16.760	27.488	5	2.54E+00	1.31E+02	3.56E+00	2.54E+00	1.31E+02	9.21E+02	9.24E+02	8
163	16.662	27.760	5	6.70E-01	2.01E+01	9.38E-01	6.70E-01	2.01E+01	1.42E+02	1.43E+02	8
164	16.336	27.323	5	7.17E-06	0.00E+00	1.00E-05	7.17E-06	0.00E+00	1.00E-05	2.01E-05	1
165	16.855	27.789	5	2.12E+00	1.23E+02	2.97E+00	2.12E+00	1.23E+02	8.64E+02	8.67E+02	8
166	16.410	27.214	5	3.55E-03	0.00E+00	4.97E-03	3.55E-03	0.00E+00	4.97E-03	9.94E-03	1
167	16.907	27.604	5	1.16E+00	5.17E+01	1.62E+00	1.16E+00	5.17E+01	3.64E+02	3.65E+02	8
168	16.750	27.212	5	2.31E+00	1.14E+02	3.23E+00	2.31E+00	1.14E+02	8.01E+02	8.04E+02	8
170	16.489	27.490	5	8.97E-03	0.00E+00	1.26E-02	8.97E-03	0.00E+00	1.26E-02	2.51E-02	1
193	17.263	23.765	5	9.22E-02	9.56E-01	1.29E-01	9.22E-02	9.56E-01	6.82E+00	6.95E+00	4
196	17.329	24.294	5	7.52E-03	0.00E+00	1.05E-02	7.52E-03	0.00E+00	1.05E-02	2.11E-02	1
197	17.350	24.467	5	4.07E-05	0.00E+00	5.70E-05	4.07E-05	0.00E+00	5.70E-05	1.14E-04	1
204	17.183	24.370	5	1.54E-01	2.73E+00	2.16E-01	1.54E-01	2.73E+00	1.93E+01	1.95E+01	5
206	17.314	24.187	5	1.82E-02	9.41E-03	2.55E-02	1.82E-02	9.41E-03	9.14E-02	1.17E-01	1
207	17.355	23.946	5	2.03E-02	0.00E+00	2.84E-02	2.03E-02	0.00E+00	2.84E-02	5.68E-02	1
208	17.275	23.609	5	9.53E-02	8.54E-01	1.33E-01	9.53E-02	8.54E-01	6.11E+00	6.24E+00	4
209	17.266	24.069	5	6.75E-02	7.05E-01	9.45E-02	6.75E-02	7.05E-01	5.03E+00	5.12E+00	3
210	17.248	24.378	5	6.74E-02	7.64E-01	9.44E-02	6.74E-02	7.64E-01	5.44E+00	5.54E+00	3
211	17.359	24.366	5	1.42E-03	0.00E+00	1.99E-03	1.42E-03	0.00E+00	1.99E-03	3.98E-03	1
212	17.355	23.859	5	2.42E-02	0.00E+00	3.39E-02	2.42E-02	0.00E+00	3.39E-02	6.78E-02	1
213	17.275	23.713	5	8.69E-02	7.92E-01	1.22E-01	8.69E-02	7.92E-01	5.67E+00	5.79E+00	3
231	16.443	27.359	5	9.48E-03	0.00E+00	1.33E-02	9.48E-03	0.00E+00	1.33E-02	2.65E-02	1
232	16.422	27.614	5	9.60E-06	0.00E+00	1.34E-05	9.60E-06	0.00E+00	1.34E-05	2.69E-05	1
233	16.534	27.462	5	5.51E-02	1.13E-01	7.71E-02	5.51E-02	1.13E-01	8.68E-01	9.45E-01	2
234	16.311	27.134	5	3.68E-06	0.00E+00	5.15E-06	3.68E-06	0.00E+00	5.15E-06	1.03E-05	1
236	16.567	27.342	5	1.31E-01	2.15E+00	1.83E-01	1.31E-01	2.15E+00	1.52E+01	1.54E+01	5
237	16.705	27.433	5	1.44E+00	6.79E+01	2.02E+00	1.44E+00	6.79E+01	4.77E+02	4.79E+02	8
253	17.471	24.264	5	3.71E-06	0.00E+00	5.19E-06	3.71E-06	0.00E+00	5.19E-06	1.04E-05	1
254	17.479	23.766	5	1.25E-05	0.00E+00	1.75E-05	1.25E-05	0.00E+00	1.75E-05	3.50E-05	1
259	17.464	24.139	5	8.84E-06	0.00E+00	1.24E-05	8.84E-06	0.00E+00	1.24E-05	2.48E-05	1
276	17.445	23.969	5	2.23E-05	0.00E+00	3.12E-05	2.23E-05	0.00E+00	3.12E-05	6.24E-05	1

Table F4
VX Exposure Estimates
Support Brigade

284	17.455	23.844	5	2.36E-05	0.00E+00	3.30E-05	2.36E-05	0.00E+00	3.30E-05	6.61E-05	1
290	16.804	22.744	1	1.09E+00	2.55E+01	1.53E+00	1.09E+00	2.55E+01	1.80E+02	1.82E+02	8
299	16.908	25.062	5	1.37E+00	4.22E+01	1.92E+00	1.37E+00	4.22E+01	2.97E+02	2.99E+02	8
300	16.519	25.093	5	3.13E-01	8.90E+00	4.38E-01	3.13E-01	8.90E+00	6.27E+01	6.32E+01	7
302	16.207	22.205	5	6.76E-03	5.41E-02	9.46E-03	6.76E-03	5.41E-02	3.88E-01	3.98E-01	2
304	16.564	22.273	5	5.14E-01	1.15E+01	7.20E-01	5.14E-01	1.15E+01	8.12E+01	8.19E+01	8
305	16.527	22.495	5	4.46E-01	9.52E+00	6.24E-01	4.46E-01	9.52E+00	6.73E+01	6.79E+01	7
306	16.298	22.635	5	9.15E-02	8.32E-01	1.28E-01	9.15E-02	8.32E-01	5.95E+00	6.08E+00	4
307	16.379	22.184	5	1.62E-01	2.70E+00	2.27E-01	1.62E-01	2.70E+00	1.91E+01	1.94E+01	5
308	16.645	22.617	5	7.51E-01	1.82E+01	1.05E+00	7.51E-01	1.82E+01	1.28E+02	1.30E+02	8
309	16.760	22.367	5	9.61E-01	2.24E+01	1.35E+00	9.61E-01	2.24E+01	1.58E+02	1.59E+02	8
314	16.295	23.584	5	7.56E-02	3.87E-01	1.06E-01	7.56E-02	3.87E-01	2.81E+00	2.92E+00	2
315	16.213	23.578	5	1.04E-02	0.00E+00	1.46E-02	1.04E-02	0.00E+00	1.46E-02	2.91E-02	1
316	16.195	23.408	5	7.59E-05	0.00E+00	1.06E-04	7.59E-05	0.00E+00	1.06E-04	2.13E-04	1
317	16.396	23.403	5	1.39E-01	2.73E+00	1.95E-01	1.39E-01	2.73E+00	1.93E+01	1.95E+01	5
356	16.541	25.512	5	3.92E-01	1.03E+01	5.49E-01	3.92E-01	1.03E+01	7.26E+01	7.32E+01	7
357	16.678	25.749	5	1.37E+00	4.53E+01	1.92E+00	1.37E+00	4.53E+01	3.19E+02	3.21E+02	8
358	16.830	25.172	5	1.73E+00	5.58E+01	2.42E+00	1.73E+00	5.58E+01	3.93E+02	3.95E+02	8
359	16.393	25.776	5	1.94E-02	4.05E-02	2.72E-02	1.94E-02	4.05E-02	3.11E-01	3.38E-01	2
360	16.612	25.614	5	7.89E-01	2.46E+01	1.10E+00	7.89E-01	2.46E+01	1.73E+02	1.74E+02	8
361	16.793	25.451	5	1.98E+00	6.33E+01	2.77E+00	1.98E+00	6.33E+01	4.46E+02	4.49E+02	8
362	16.299	25.776	5	1.16E-05	0.00E+00	1.62E-05	1.16E-05	0.00E+00	1.62E-05	3.25E-05	1
363	16.662	25.350	5	1.20E+00	3.74E+01	1.68E+00	1.20E+00	3.74E+01	2.63E+02	2.65E+02	8
365	16.690	25.195	5	1.38E+00	4.32E+01	1.93E+00	1.38E+00	4.32E+01	3.04E+02	3.06E+02	8
366	16.408	25.423	5	6.41E-02	8.85E-01	8.97E-02	6.41E-02	8.85E-01	6.28E+00	6.37E+00	4
367	16.439	22.517	5	2.42E-01	4.75E+00	3.39E-01	2.42E-01	4.75E+00	3.36E+01	3.39E+01	6
368	16.261	25.626	5	1.19E-05	0.00E+00	1.67E-05	1.19E-05	0.00E+00	1.67E-05	3.33E-05	1
369	16.461	25.593	5	1.19E-01	2.51E+00	1.67E-01	1.19E-01	2.51E+00	1.77E+01	1.79E+01	5
374	16.417	23.547	5	1.75E-01	3.49E+00	2.45E-01	1.75E-01	3.49E+00	2.47E+01	2.49E+01	5
375	16.323	23.462	5	9.56E-02	9.16E-01	1.34E-01	9.56E-02	9.16E-01	6.55E+00	6.68E+00	4
381	16.580	25.286	5	6.26E-01	1.80E+01	8.76E-01	6.26E-01	1.80E+01	1.27E+02	1.28E+02	8
383	16.330	25.572	5	1.20E-02	0.00E+00	1.68E-02	1.20E-02	0.00E+00	1.68E-02	3.36E-02	1
384	16.440	25.136	5	1.30E-01	2.49E+00	1.82E-01	1.30E-01	2.49E+00	1.76E+01	1.78E+01	5
385	16.299	25.419	5	3.01E-05	0.00E+00	4.21E-05	3.01E-05	0.00E+00	4.21E-05	8.43E-05	1
397	16.906	26.690	5	8.95E-01	2.18E+01	1.25E+00	8.95E-01	2.18E+01	1.54E+02	1.55E+02	8
398	16.833	22.662	5	1.02E+00	2.45E+01	1.43E+00	1.02E+00	2.45E+01	1.73E+02	1.74E+02	8
400	16.153	22.847	5	4.94E-05	0.00E+00	6.92E-05	4.94E-05	0.00E+00	6.92E-05	1.38E-04	1
401	16.293	22.563	5	8.72E-02	7.97E-01	1.22E-01	8.72E-02	7.97E-01	5.70E+00	5.82E+00	3
402	16.343	22.889	5	1.07E-01	1.55E+00	1.50E-01	1.07E-01	1.55E+00	1.10E+01	1.11E+01	4
404	16.286	22.732	5	7.99E-02	6.44E-01	1.12E-01	7.99E-02	6.44E-01	4.62E+00	4.73E+00	3
405	16.114	22.560	5	1.18E-05	0.00E+00	1.65E-05	1.18E-05	0.00E+00	1.65E-05	3.30E-05	1
407	16.372	23.461	5	1.25E-01	2.00E+00	1.75E-01	1.25E-01	2.00E+00	1.42E+01	1.44E+01	4
408	16.223	23.534	5	1.85E-02	0.00E+00	2.59E-02	1.85E-02	0.00E+00	2.59E-02	5.18E-02	1
410	16.318	23.537	5	9.19E-02	7.79E-01	1.29E-01	9.19E-02	7.79E-01	5.58E+00	5.71E+00	3
414	16.882	25.906	5	1.73E+00	6.10E+01	2.42E+00	1.73E+00	6.10E+01	4.29E+02	4.32E+02	8
415	16.328	22.349	5	1.14E-01	1.48E+00	1.60E-01	1.14E-01	1.48E+00	1.05E+01	1.07E+01	4
416	16.932	22.046	5	7.60E-01	1.70E+01	1.06E+00	7.60E-01	1.70E+01	1.20E+02	1.21E+02	8
417	16.754	22.038	5	9.00E-01	2.03E+01	1.26E+00	9.00E-01	2.03E+01	1.43E+02	1.45E+02	8
418	16.483	22.377	5	3.44E-01	6.85E+00	4.82E-01	3.44E-01	6.85E+00	4.84E+01	4.89E+01	6
419	16.952	22.920	5	7.96E-01	1.98E+01	1.11E+00	7.96E-01	1.98E+01	1.40E+02	1.41E+02	8
422	16.365	23.575	5	1.22E-01	1.73E+00	1.71E-01	1.22E-01	1.73E+00	1.23E+01	1.25E+01	4
445	16.268	23.434	5	5.58E-02	1.97E-01	7.81E-02	5.58E-02	1.97E-01	1.46E+00	1.54E+00	2
449	16.354	25.040	5	4.59E-02	9.17E-02	6.43E-02	4.59E-02	9.17E-02	7.06E-01	7.70E-01	2
450	16.268	25.222	5	2.77E-05	0.00E+00	3.88E-05	2.77E-05	0.00E+00	3.88E-05	7.76E-05	1
451	16.218	25.131	5	8.21E-06	0.00E+00	1.15E-05	8.21E-06	0.00E+00	1.15E-05	2.30E-05	1
457	16.286	23.014	5	7.65E-02	5.19E-01	1.07E-01	7.65E-02	5.19E-01	3.74E+00	3.85E+00	3
458	16.114	22.719	5	1.27E-05	0.00E+00	1.78E-05	1.27E-05	0.00E+00	1.78E-05	3.56E-05	1
459	16.557	22.774	5	5.35E-01	1.20E+01	7.49E-01	5.35E-01	1.20E+01	8.47E+01	8.55E+01	8
460	16.473	22.855	5	3.18E-01	6.53E+00	4.45E-01	3.18E-01	6.53E+00	4.62E+01	4.66E+01	6
461	16.578	22.896	5	5.91E-01	1.39E+01	8.27E-01	5.91E-01	1.39E+01	9.81E+01	9.90E+01	8
462	16.264	23.495	5	5.19E-02	1.40E-01	7.27E-02	5.19E-02	1.40E-01	1.05E+00	1.13E+00	2
463	16.889	25.306	5	1.52E+00	4.91E+01	2.13E+00	1.52E+00	4.91E+01	3.46E+02	3.48E+02	8
464	16.909	25.522	5	1.45E+00	4.69E+01	2.03E+00	1.45E+00	4.69E+01	3.30E+02	3.32E+02	8
465	16.790	25.730	5	2.12E+00	7.01E+01	2.97E+00	2.12E+00	7.01E+01	4.94E+02	4.97E+02	8
466	16.535	25.774	5	3.34E-01	8.59E+00	4.68E-01	3.34E-01	8.59E+00	6.06E+01	6.11E+01	7
468	16.390	25.219	5	6.54E-02	7.23E-01	9.16E-02	6.54E-02	7.23E-01	5.15E+00	5.24E+00	3
469	16.510	25.346	5	2.43E-01	7.08E+00	3.40E-01	2.43E-01	7.08E+00	4.99E+01	5.02E+01	7

Case 2: Protected

1 round at aimpoint (17.35, 25.50)

Table F4
VX Exposure Estimates
Support Brigade

52	17.293	24.340	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E+01	1.73E+02	1.73E+02	8
54	17.418	24.675	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.76E-01	4.03E+00	4.03E+00	3
55	17.339	24.697	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E+02	8.54E+02	8.54E+02	8
56	17.274	24.597	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E+00	1.25E+01	1.25E+01	4
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E+02	1.53E+03	1.53E+03	8
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+02	9.31E+02	9.31E+02	8
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-01	1.60E+00	1.60E+00	2
60	17.421	24.329	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E+01	1.23E+02	1.23E+02	8
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E+00	1.40E+01	1.40E+01	4
101	17.439	24.597	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-01	5.71E+00	5.71E+00	3
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E+02	1.24E+03	1.24E+03	8
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-01	5.39E+00	5.39E+00	3
107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E+02	1.11E+03	1.11E+03	8
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E+01	1.41E+02	1.41E+02	8
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E+01	1.33E+02	1.33E+02	8
112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+00	7.00E+00	7.00E+00	4
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.38E+00	6.57E+01	6.57E+01	7
115	17.323	24.549	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.38E+01	6.57E+02	6.57E+02	8
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E+01	2.84E+02	2.84E+02	8
119	17.263	24.484	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+00	1.70E+01	1.70E+01	5
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E+00	2.98E+01	2.98E+01	5
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E+02	1.05E+03	1.05E+03	8
197	17.350	24.467	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E+02	1.51E+03	1.51E+03	8
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+02	7.21E+02	7.21E+02	8
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+02	8.33E+02	8.33E+02	8
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E+01	1.54E+02	1.54E+02	8
211	17.359	24.366	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E+02	1.32E+03	1.32E+03	8
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E+01	5.08E+02	5.08E+02	8
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E+00	1.02E+01	1.02E+01	4
253	17.471	24.264	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-01	1.29E+00	1.29E+00	2
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-01	3.12E+00	3.12E+00	3
259	17.464	24.139	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E+00	7.14E+00	7.14E+00	4
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E+00	5.26E+01	5.26E+01	7
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E+00	1.46E+01	1.46E+01	4

VX 500kg TBM
Moderate Attack
Height of Release: 500m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)		
Case 1: Unprotected				2 rounds at aimpoint (19.30, 30.00)								
1	18.436	22.418	1	1.22E-01	9.77E+00	1.71E-01	1.22E-01	9.77E+00	6.86E+01	6.87E+01	7	
2	18.822	27.915	2	4.49E-01	8.04E+01	6.29E-01	4.49E-01	8.04E+01	5.63E+02	5.64E+02	8	
3	17.181	23.524	2	2.12E-02	1.10E+00	2.97E-02	2.12E-02	1.10E+00	7.73E+00	7.76E+00	4	
4	18.493	25.220	3	1.55E-01	2.19E+01	2.17E-01	1.55E-01	2.19E+01	1.54E+02	1.54E+02	8	
8	17.462	26.876	5	1.69E-03	4.59E-01	2.37E-03	1.69E-03	4.59E-01	3.22E+00	3.22E+00	3	
9	17.366	26.775	5	1.14E-03	2.32E-01	1.60E-03	1.14E-03	2.32E-01	1.63E+00	1.63E+00	2	
10	18.147	27.560	5	8.43E-02	8.52E+00	1.18E-01	8.43E-02	8.52E+00	5.98E+01	5.99E+01	7	
11	17.742	26.629	5	6.10E-02	2.95E+00	8.54E-02	6.10E-02	2.95E+00	2.07E+01	2.08E+01	5	
12	18.130	27.247	5	8.93E-02	9.56E+00	1.25E-01	8.93E-02	9.56E+00	6.70E+01	6.72E+01	7	
13	17.460	26.751	5	3.44E-03	5.86E-01	4.82E-03	3.44E-03	5.86E-01	4.11E+00	4.11E+00	3	
14	18.595	27.455	5	2.49E-01	4.33E+01	3.49E-01	2.49E-01	4.33E+01	3.03E+02	3.04E+02	8	
15	19.307	26.354	5	5.37E-01	6.77E+01	7.52E-01	5.37E-01	6.77E+01	4.75E+02	4.75E+02	8	
16	19.346	25.560	5	3.88E-01	4.77E+01	5.43E-01	3.88E-01	4.77E+01	3.34E+02	3.35E+02	8	
17	19.516	26.029	5	4.69E-01	5.78E+01	6.57E-01	4.69E-01	5.78E+01	4.05E+02	4.06E+02	8	
18	18.420	27.447	5	1.67E-01	2.63E+01	2.34E-01	1.67E-01	2.63E+01	1.84E+02	1.85E+02	8	
19	18.212	27.476	5	9.55E-02	1.20E+01	1.34E-01	9.55E-02	1.20E+01	8.41E+01	8.43E+01	8	
20	19.204	26.454	5	4.98E-01	6.78E+01	6.97E-01	4.98E-01	6.78E+01	4.75E+02	4.76E+02	8	
21	18.222	27.296	5	1.16E-01	1.36E+01	1.62E-01	1.16E-01	1.36E+01	9.54E+01	9.55E+01	8	
22	19.922	25.515	5	2.71E-01	3.51E+01	3.79E-01	2.71E-01	3.51E+01	2.46E+02	2.46E+02	8	
23	18.087	27.398	5	7.80E-02	7.09E+00	1.09E-01	7.80E-02	7.09E+00	4.97E+01	4.98E+01	6	
24	19.801	25.844	5	3.38E-01	4.47E+01	4.73E-01	3.38E-01	4.47E+01	3.13E+02	3.14E+02	8	
25	19.210	25.865	5	4.34E-01	5.28E+01	6.08E-01	4.34E-01	5.28E+01	3.70E+02	3.71E+02	8	
26	18.329	27.823	5	1.11E-01	1.57E+01	1.55E-01	1.11E-01	1.57E+01	1.10E+02	1.10E+02	8	

Table F4
VX Exposure Estimates
Support Brigade

27	18.712	27.105	5	3.36E-01	5.12E+01	4.70E-01	3.36E-01	5.12E+01	3.59E+02	3.59E+02	8
28	18.856	27.306	5	4.45E-01	6.86E+01	6.23E-01	4.45E-01	6.86E+01	4.81E+02	4.81E+02	8
29	18.374	27.844	5	1.27E-01	1.93E+01	1.78E-01	1.27E-01	1.93E+01	1.35E+02	1.35E+02	8
30	18.405	27.220	5	1.95E-01	2.55E+01	2.73E-01	1.95E-01	2.55E+01	1.79E+02	1.79E+02	8
31	18.118	27.716	5	7.05E-02	6.04E+00	9.87E-02	7.05E-02	6.04E+00	4.24E+01	4.25E+01	6
32	18.658	27.207	5	3.00E-01	4.76E+01	4.20E-01	3.00E-01	4.76E+01	3.34E+02	3.34E+02	8
33	18.081	27.914	5	4.19E-02	3.57E+00	5.87E-02	4.19E-02	3.57E+00	2.50E+01	2.51E+01	5
34	18.942	27.051	5	4.83E-01	7.01E+01	6.76E-01	4.83E-01	7.01E+01	4.91E+02	4.92E+02	8
35	18.597	25.229	5	2.14E-01	2.53E+01	3.00E-01	2.14E-01	2.53E+01	1.77E+02	1.78E+02	8
36	18.520	27.504	5	2.07E-01	3.50E+01	2.90E-01	2.07E-01	3.50E+01	2.45E+02	2.46E+02	8
37	18.503	25.254	5	1.59E-01	2.24E+01	2.23E-01	1.59E-01	2.24E+01	1.57E+02	1.57E+02	8
38	19.604	25.703	5	3.86E-01	4.82E+01	5.40E-01	3.86E-01	4.82E+01	3.38E+02	3.38E+02	8
39	18.591	24.662	5	1.73E-01	2.13E+01	2.42E-01	1.73E-01	2.13E+01	1.49E+02	1.50E+02	8
40	18.651	25.229	5	2.47E-01	2.71E+01	3.46E-01	2.47E-01	2.71E+01	1.90E+02	1.90E+02	8
41	18.896	23.788	5	1.92E-01	2.09E+01	2.69E-01	1.92E-01	2.09E+01	1.47E+02	1.47E+02	8
42	18.853	24.109	5	2.14E-01	2.26E+01	3.00E-01	2.14E-01	2.26E+01	1.58E+02	1.59E+02	8
43	18.892	24.476	5	2.75E-01	2.64E+01	3.85E-01	2.75E-01	2.64E+01	1.85E+02	1.86E+02	8
44	18.936	24.319	5	2.78E-01	2.56E+01	3.89E-01	2.78E-01	2.56E+01	1.80E+02	1.80E+02	8
45	18.777	24.732	5	2.58E-01	2.62E+01	3.61E-01	2.58E-01	2.62E+01	1.84E+02	1.84E+02	8
46	18.921	24.089	5	2.42E-01	2.35E+01	3.39E-01	2.42E-01	2.35E+01	1.65E+02	1.65E+02	8
47	17.923	22.204	5	1.50E-01	5.08E+00	2.10E-01	1.50E-01	5.08E+00	3.58E+01	3.60E+01	6
48	17.187	23.651	5	2.13E-02	1.10E+00	2.98E-02	2.13E-02	1.10E+00	7.73E+00	7.76E+00	4
49	17.468	24.443	5	6.80E-02	2.18E+00	9.52E-02	6.80E-02	2.18E+00	1.54E+01	1.55E+01	5
50	17.487	24.398	5	7.34E-02	2.28E+00	1.03E-01	7.34E-02	2.28E+00	1.61E+01	1.62E+01	5
51	18.556	25.363	5	1.98E-01	2.49E+01	2.77E-01	1.98E-01	2.49E+01	1.75E+02	1.75E+02	8
52	17.293	24.340	5	2.82E-02	1.33E+00	3.95E-02	2.82E-02	1.33E+00	9.35E+00	9.39E+00	4
53	17.202	24.669	5	1.49E-02	9.57E-01	2.09E-02	1.49E-02	9.57E-01	6.72E+00	6.74E+00	4
54	17.418	24.675	5	5.22E-02	1.89E+00	7.31E-02	5.22E-02	1.89E+00	1.33E+01	1.34E+01	4
55	17.339	24.697	5	3.32E-02	1.49E+00	4.65E-02	3.32E-02	1.49E+00	1.05E+01	1.05E+01	4
56	17.274	24.597	5	2.29E-02	1.23E+00	3.21E-02	2.29E-02	1.23E+00	8.64E+00	8.67E+00	4
57	17.347	24.131	5	4.31E-02	1.65E+00	6.03E-02	4.31E-02	1.65E+00	1.16E+01	1.17E+01	4
58	17.336	24.001	5	4.20E-02	1.63E+00	5.88E-02	4.20E-02	1.63E+00	1.15E+01	1.15E+01	4
59	17.205	23.842	5	2.24E-02	1.14E+00	3.14E-02	2.24E-02	1.14E+00	8.01E+00	8.04E+00	4
60	17.421	24.329	5	5.85E-02	1.96E+00	8.19E-02	5.85E-02	1.96E+00	1.38E+01	1.39E+01	4
61	17.701	26.488	5	6.47E-02	2.61E+00	9.06E-02	6.47E-02	2.61E+00	1.84E+01	1.85E+01	5
62	17.464	26.662	5	6.51E-03	6.92E-01	9.11E-03	6.51E-03	6.92E-01	4.85E+00	4.86E+00	3
63	18.818	24.344	5	2.29E-01	2.38E+01	3.21E-01	2.29E-01	2.38E+01	1.67E+02	1.67E+02	8
64	18.630	24.478	5	1.75E-01	2.10E+01	2.45E-01	1.75E-01	2.10E+01	1.47E+02	1.47E+02	8
65	18.806	24.225	5	2.08E-01	2.27E+01	2.91E-01	2.08E-01	2.27E+01	1.59E+02	1.59E+02	8
66	18.725	24.470	5	2.08E-01	2.30E+01	2.91E-01	2.08E-01	2.30E+01	1.61E+02	1.62E+02	8
67	18.548	24.460	5	1.47E-01	1.91E+01	2.06E-01	1.47E-01	1.91E+01	1.34E+02	1.34E+02	8
68	17.659	26.754	5	3.91E-02	1.83E+00	5.47E-02	3.91E-02	1.83E+00	1.29E+01	1.29E+01	4
69	17.555	26.861	5	1.30E-02	9.49E-01	1.82E-02	1.30E-02	9.49E-01	6.66E+00	6.68E+00	4
70	18.282	22.390	5	9.49E-02	8.32E+00	1.33E-01	9.49E-02	8.32E+00	5.84E+01	5.85E+01	7
71	17.598	26.569	5	3.51E-02	1.70E+00	4.91E-02	3.51E-02	1.70E+00	1.19E+01	1.20E+01	4
72	17.445	26.254	5	1.80E-02	1.06E+00	2.52E-02	1.80E-02	1.06E+00	7.45E+00	7.47E+00	4
73	17.815	26.257	5	9.76E-02	4.58E+00	1.37E-01	9.76E-02	4.58E+00	3.22E+01	3.23E+01	6
74	17.693	26.866	5	4.02E-02	1.85E+00	5.63E-02	4.02E-02	1.85E+00	1.30E+01	1.31E+01	4
75	17.678	26.639	5	5.01E-02	2.18E+00	7.01E-02	5.01E-02	2.18E+00	1.53E+01	1.54E+01	5
76	17.409	26.724	5	3.01E-03	4.18E-01	4.21E-03	3.01E-03	4.18E-01	2.93E+00	2.93E+00	2
77	17.784	26.491	5	7.70E-02	3.79E+00	1.08E-01	7.70E-02	3.79E+00	2.66E+01	2.67E+01	5
78	17.875	26.374	5	1.01E-01	5.28E+00	1.41E-01	1.01E-01	5.28E+00	3.71E+01	3.72E+01	6
79	18.238	22.525	5	9.78E-02	8.19E+00	1.37E-01	9.78E-02	8.19E+00	5.75E+01	5.76E+01	7
80	18.435	22.682	5	1.35E-01	1.05E+01	1.89E-01	1.35E-01	1.05E+01	7.37E+01	7.39E+01	7
81	17.870	26.656	5	7.42E-02	4.68E+00	1.04E-01	7.42E-02	4.68E+00	3.29E+01	3.30E+01	6
82	17.332	26.414	5	3.73E-03	3.75E-01	5.22E-03	3.73E-03	3.75E-01	2.63E+00	2.64E+00	2
83	18.456	22.521	5	1.33E-01	1.02E+01	1.86E-01	1.33E-01	1.02E+01	7.16E+01	7.18E+01	7
84	17.736	26.324	5	8.06E-02	3.36E+00	1.13E-01	8.06E-02	3.36E+00	2.36E+01	2.37E+01	5
85	17.884	22.396	5	1.77E-01	4.96E+00	2.48E-01	1.77E-01	4.96E+00	3.50E+01	3.52E+01	6
86	17.487	26.466	5	1.48E-02	1.02E+00	2.07E-02	1.48E-02	1.02E+00	7.16E+00	7.18E+00	4
87	17.977	22.662	5	1.75E-01	6.02E+00	2.45E-01	1.75E-01	6.02E+00	4.24E+01	4.26E+01	6
88	18.843	24.530	5	2.62E-01	2.59E+01	3.67E-01	2.62E-01	2.59E+01	1.82E+02	1.82E+02	8
89	18.290	22.615	5	8.99E-02	8.85E+00	1.26E-01	8.99E-02	8.85E+00	6.21E+01	6.22E+01	7
90	18.430	22.295	5	1.13E-01	9.40E+00	1.58E-01	1.13E-01	9.40E+00	6.60E+01	6.61E+01	7
91	17.898	22.639	5	1.99E-01	5.31E+00	2.79E-01	1.99E-01	5.31E+00	3.74E+01	3.77E+01	6
92	18.185	22.679	5	1.14E-01	7.96E+00	1.60E-01	1.14E-01	7.96E+00	5.59E+01	5.60E+01	7
93	17.348	26.251	5	6.98E-03	6.16E-01	9.77E-03	6.98E-03	6.16E-01	4.32E+00	4.33E+00	3
94	17.418	26.441	5	1.03E-02	7.36E-01	1.44E-02	1.03E-02	7.36E-01	5.17E+00	5.18E+00	3

Table F4
VX Exposure Estimates
Support Brigade

95	17.937	26.836	5	6.11E-02	5.59E+00	8.55E-02	6.11E-02	5.59E+00	3.92E+01	3.93E+01	6
96	18.540	25.208	5	1.78E-01	2.33E+01	2.49E-01	1.78E-01	2.33E+01	1.63E+02	1.64E+02	8
97	18.546	25.327	5	1.90E-01	2.43E+01	2.66E-01	1.90E-01	2.43E+01	1.70E+02	1.71E+02	8
98	17.590	26.733	5	2.50E-02	1.38E+00	3.50E-02	2.50E-02	1.38E+00	9.70E+00	9.73E+00	4
99	17.775	26.941	5	4.53E-02	2.72E+00	6.34E-02	4.53E-02	2.72E+00	1.91E+01	1.92E+01	5
100	17.232	23.912	5	2.53E-02	1.22E+00	3.54E-02	2.53E-02	1.22E+00	8.58E+00	8.61E+00	4
101	17.439	24.597	5	5.85E-02	2.01E+00	8.19E-02	5.85E-02	2.01E+00	1.42E+01	1.42E+01	4
102	17.175	24.255	5	1.61E-02	9.62E-01	2.25E-02	1.61E-02	9.62E-01	6.76E+00	6.78E+00	4
103	17.359	24.059	5	4.70E-02	1.73E+00	6.58E-02	4.70E-02	1.73E+00	1.22E+01	1.22E+01	4
104	17.452	24.521	5	6.28E-02	2.09E+00	8.79E-02	6.28E-02	2.09E+00	1.47E+01	1.48E+01	4
105	17.223	23.804	5	2.51E-02	1.19E+00	3.51E-02	2.51E-02	1.19E+00	8.37E+00	8.40E+00	4
106	17.181	24.103	5	1.77E-02	1.02E+00	2.48E-02	1.77E-02	1.02E+00	7.16E+00	7.19E+00	4
107	17.369	24.259	5	4.68E-02	1.72E+00	6.55E-02	4.68E-02	1.72E+00	1.21E+01	1.22E+01	4
108	17.177	24.439	5	1.50E-02	9.30E-01	2.10E-02	1.50E-02	9.30E-01	6.53E+00	6.55E+00	4
109	17.196	24.503	5	1.62E-02	9.79E-01	2.27E-02	1.62E-02	9.79E-01	6.88E+00	6.90E+00	4
110	17.283	23.842	5	3.26E-02	1.39E+00	4.56E-02	3.26E-02	1.39E+00	9.78E+00	9.82E+00	4
111	17.266	23.993	5	2.88E-02	1.33E+00	4.03E-02	2.88E-02	1.33E+00	9.35E+00	9.39E+00	4
112	17.244	24.171	5	2.45E-02	1.22E+00	3.43E-02	2.45E-02	1.22E+00	8.57E+00	8.61E+00	4
113	17.262	24.275	5	2.56E-02	1.25E+00	3.58E-02	2.56E-02	1.25E+00	8.79E+00	8.82E+00	4
114	17.357	23.679	5	5.14E-02	1.77E+00	7.20E-02	5.14E-02	1.77E+00	1.25E+01	1.25E+01	4
115	17.323	24.549	5	3.16E-02	1.44E+00	4.42E-02	3.16E-02	1.44E+00	1.01E+01	1.02E+01	4
116	17.342	23.597	5	4.85E-02	1.69E+00	6.79E-02	4.85E-02	1.69E+00	1.19E+01	1.20E+01	4
117	17.349	23.785	5	4.80E-02	1.72E+00	6.72E-02	4.80E-02	1.72E+00	1.21E+01	1.22E+01	4
118	17.359	23.524	5	5.31E-02	1.79E+00	7.43E-02	5.31E-02	1.79E+00	1.26E+01	1.27E+01	4
119	17.263	24.484	5	2.33E-02	1.20E+00	3.26E-02	2.33E-02	1.20E+00	8.43E+00	8.47E+00	4
120	18.546	23.924	5	1.59E-01	1.64E+01	2.23E-01	1.59E-01	1.64E+01	1.15E+02	1.15E+02	8
121	18.621	23.802	5	1.52E-01	1.70E+01	2.13E-01	1.52E-01	1.70E+01	1.19E+02	1.19E+02	8
122	18.534	24.025	5	1.55E-01	1.66E+01	2.17E-01	1.55E-01	1.66E+01	1.16E+02	1.17E+02	8
123	18.669	23.711	5	1.40E-01	1.73E+01	1.96E-01	1.40E-01	1.73E+01	1.21E+02	1.21E+02	8
124	18.708	24.080	5	1.58E-01	2.01E+01	2.21E-01	1.58E-01	2.01E+01	1.41E+02	1.41E+02	8
125	18.731	23.867	5	1.50E-01	1.91E+01	2.10E-01	1.50E-01	1.91E+01	1.34E+02	1.34E+02	8
126	17.927	22.304	5	1.58E-01	5.20E+00	2.21E-01	1.58E-01	5.20E+00	3.66E+01	3.68E+01	6
127	18.068	22.411	5	1.10E-01	6.47E+00	1.54E-01	1.10E-01	6.47E+00	4.54E+01	4.56E+01	6
128	18.221	22.341	5	9.13E-02	7.69E+00	1.28E-01	9.13E-02	7.69E+00	5.40E+01	5.41E+01	7
129	17.950	22.413	5	1.59E-01	5.50E+00	2.23E-01	1.59E-01	5.50E+00	3.87E+01	3.89E+01	6
130	18.113	22.192	5	6.70E-02	6.53E+00	9.38E-02	6.70E-02	6.53E+00	4.58E+01	4.59E+01	6
131	18.022	22.275	5	1.12E-01	5.92E+00	1.57E-01	1.12E-01	5.92E+00	4.16E+01	4.18E+01	6
132	18.150	22.445	5	9.94E-02	7.24E+00	1.39E-01	9.94E-02	7.24E+00	5.08E+01	5.10E+01	7
133	18.565	23.665	5	1.59E-01	1.55E+01	2.23E-01	1.59E-01	1.55E+01	1.09E+02	1.09E+02	8
134	18.225	27.128	5	1.31E-01	1.45E+01	1.83E-01	1.31E-01	1.45E+01	1.02E+02	1.02E+02	8
135	18.771	27.659	5	3.71E-01	6.67E+01	5.19E-01	3.71E-01	6.67E+01	4.67E+02	4.68E+02	8
136	19.391	25.944	5	4.75E-01	5.63E+01	6.65E-01	4.75E-01	5.63E+01	3.95E+02	3.95E+02	8
137	18.697	27.843	5	3.04E-01	6.01E+01	4.26E-01	3.04E-01	6.01E+01	4.21E+02	4.22E+02	8
138	19.490	25.738	5	4.47E-01	5.13E+01	6.26E-01	4.47E-01	5.13E+01	3.60E+02	3.60E+02	8
139	19.977	26.068	5	3.44E-01	3.96E+01	4.82E-01	3.44E-01	3.96E+01	2.78E+02	2.78E+02	8
140	18.870	27.815	5	4.89E-01	8.47E+01	6.85E-01	4.89E-01	8.47E+01	5.94E+02	5.94E+02	8
141	18.922	27.754	5	5.19E-01	8.83E+01	7.27E-01	5.19E-01	8.83E+01	6.19E+02	6.20E+02	8
142	19.639	26.150	5	4.13E-01	5.75E+01	5.78E-01	4.13E-01	5.75E+01	4.03E+02	4.04E+02	8
143	17.185	23.996	5	1.89E-02	1.06E+00	2.65E-02	1.89E-02	1.06E+00	7.45E+00	7.47E+00	4
144	18.880	27.544	5	4.68E-01	7.73E+01	6.55E-01	4.68E-01	7.73E+01	5.42E+02	5.42E+02	8
145	19.581	26.027	5	4.29E-01	5.60E+01	6.01E-01	4.29E-01	5.60E+01	3.93E+02	3.93E+02	8
146	19.614	25.895	5	3.96E-01	5.21E+01	5.54E-01	3.96E-01	5.21E+01	3.65E+02	3.66E+02	8
147	19.643	26.386	5	4.58E-01	6.37E+01	6.41E-01	4.58E-01	6.37E+01	4.47E+02	4.47E+02	8
148	19.216	25.692	5	4.09E-01	4.92E+01	5.73E-01	4.09E-01	4.92E+01	3.45E+02	3.46E+02	8
149	19.465	26.307	5	5.26E-01	6.61E+01	7.36E-01	5.26E-01	6.61E+01	4.63E+02	4.64E+02	8
150	19.927	26.258	5	3.50E-01	4.55E+01	4.90E-01	3.50E-01	4.55E+01	3.19E+02	3.19E+02	8
151	18.507	25.357	5	1.72E-01	2.32E+01	2.41E-01	1.72E-01	2.32E+01	1.63E+02	1.63E+02	8
153	18.624	25.296	5	2.32E-01	2.67E+01	3.25E-01	2.32E-01	2.67E+01	1.87E+02	1.88E+02	8
158	17.797	26.587	5	7.12E-02	3.81E+00	9.97E-02	7.12E-02	3.81E+00	2.68E+01	2.69E+01	5
160	17.812	26.724	5	6.17E-02	3.73E+00	8.64E-02	6.17E-02	3.73E+00	2.62E+01	2.63E+01	5
169	17.864	26.943	5	5.46E-02	3.88E+00	7.64E-02	5.46E-02	3.88E+00	2.72E+01	2.73E+01	5
172	17.953	26.234	5	1.24E-01	7.21E+00	1.74E-01	1.24E-01	7.21E+00	5.06E+01	5.08E+01	7
173	19.274	26.128	5	5.00E-01	6.06E+01	7.00E-01	5.00E-01	6.06E+01	4.25E+02	4.26E+02	8
174	18.250	27.882	5	8.66E-02	1.03E+01	1.21E-01	8.66E-02	1.03E+01	7.22E+01	7.23E+01	7
175	19.286	25.957	5	4.77E-01	5.65E+01	6.68E-01	4.77E-01	5.65E+01	3.96E+02	3.97E+02	8
176	19.865	26.006	5	3.59E-01	4.47E+01	5.03E-01	3.59E-01	4.47E+01	3.13E+02	3.14E+02	8
177	19.951	26.469	5	3.52E-01	4.72E+01	4.93E-01	3.52E-01	4.72E+01	3.31E+02	3.31E+02	8
178	18.548	27.223	5	2.53E-01	3.73E+01	3.54E-01	2.53E-01	3.73E+01	2.61E+02	2.62E+02	8

Table F4
VX Exposure Estimates
Support Brigade

179	18.791	27.502	5	3.86E-01	6.57E+01	5.40E-01	3.86E-01	6.57E+01	4.60E+02	4.61E+02	8
180	18.355	27.121	5	1.88E-01	2.19E+01	2.63E-01	1.88E-01	2.19E+01	1.54E+02	1.54E+02	8
181	18.384	27.661	5	1.27E-01	2.20E+01	1.78E-01	1.27E-01	2.20E+01	1.54E+02	1.54E+02	8
182	18.585	27.791	5	2.28E-01	4.34E+01	3.19E-01	2.28E-01	4.34E+01	3.04E+02	3.04E+02	8
183	19.771	26.216	5	3.73E-01	5.35E+01	5.22E-01	3.73E-01	5.35E+01	3.75E+02	3.76E+02	8
184	18.050	27.077	5	6.30E-02	7.65E+00	8.82E-02	6.30E-02	7.65E+00	5.36E+01	5.37E+01	7
185	18.939	27.956	5	5.55E-01	9.78E+01	7.77E-01	5.55E-01	9.78E+01	6.85E+02	6.86E+02	8
186	18.456	25.249	5	1.62E-01	2.09E+01	2.27E-01	1.62E-01	2.09E+01	1.47E+02	1.47E+02	8
187	17.885	22.726	5	2.03E-01	5.27E+00	2.84E-01	2.03E-01	5.27E+00	3.72E+01	3.75E+01	6
188	18.802	24.452	5	2.37E-01	2.44E+01	3.32E-01	2.37E-01	2.44E+01	1.71E+02	1.71E+02	8
189	18.711	24.196	5	1.73E-01	2.09E+01	2.42E-01	1.73E-01	2.09E+01	1.47E+02	1.47E+02	8
190	18.650	24.342	5	1.75E-01	2.06E+01	2.45E-01	1.75E-01	2.06E+01	1.44E+02	1.45E+02	8
191	18.361	22.159	5	9.79E-02	8.50E+00	1.37E-01	9.79E-02	8.50E+00	5.96E+01	5.98E+01	7
192	18.459	25.309	5	1.67E-01	2.14E+01	2.34E-01	1.67E-01	2.14E+01	1.50E+02	1.50E+02	8
193	17.263	23.765	5	3.07E-02	1.32E+00	4.30E-02	3.07E-02	1.32E+00	9.28E+00	9.33E+00	4
194	19.700	25.769	5	3.35E-01	4.73E+01	4.69E-01	3.35E-01	4.73E+01	3.32E+02	3.32E+02	8
195	17.552	24.359	5	8.41E-02	2.85E+00	1.18E-01	8.41E-02	2.85E+00	2.01E+01	2.02E+01	5
196	17.329	24.294	5	3.66E-02	1.51E+00	5.12E-02	3.66E-02	1.51E+00	1.06E+01	1.07E+01	4
197	17.350	24.467	5	3.93E-02	1.58E+00	5.50E-02	3.93E-02	1.58E+00	1.11E+01	1.12E+01	4
198	18.347	22.723	5	1.03E-01	9.67E+00	1.44E-01	1.03E-01	9.67E+00	6.78E+01	6.80E+01	7
199	17.470	26.332	5	1.82E-02	1.09E+00	2.55E-02	1.82E-02	1.09E+00	7.66E+00	7.68E+00	4
200	17.542	26.309	5	3.33E-02	1.59E+00	4.66E-02	3.33E-02	1.59E+00	1.12E+01	1.12E+01	4
201	18.562	25.274	5	1.96E-01	2.45E+01	2.74E-01	1.96E-01	2.45E+01	1.72E+02	1.72E+02	8
202	18.502	25.317	5	1.65E-01	2.28E+01	2.31E-01	1.65E-01	2.28E+01	1.60E+02	1.60E+02	8
203	17.342	26.573	5	2.89E-03	2.27E-01	4.05E-03	2.89E-03	2.27E-01	1.59E+00	1.60E+00	2
204	17.183	24.370	5	1.63E-02	9.64E-01	2.28E-02	1.63E-02	9.64E-01	6.77E+00	6.79E+00	4
205	18.626	24.203	5	1.61E-01	1.93E+01	2.25E-01	1.61E-01	1.93E+01	1.35E+02	1.36E+02	8
206	17.314	24.187	5	3.42E-02	1.47E+00	4.79E-02	3.42E-02	1.47E+00	1.03E+01	1.04E+01	4
207	17.355	23.946	5	4.74E-02	1.74E+00	6.64E-02	4.74E-02	1.74E+00	1.22E+01	1.23E+01	4
208	17.275	23.609	5	3.40E-02	1.37E+00	4.76E-02	3.40E-02	1.37E+00	9.64E+00	9.69E+00	4
209	17.266	24.069	5	2.81E-02	1.32E+00	3.93E-02	2.81E-02	1.32E+00	9.28E+00	9.32E+00	4
210	17.248	24.378	5	2.31E-02	1.17E+00	3.23E-02	2.31E-02	1.17E+00	8.22E+00	8.25E+00	4
211	17.359	24.366	5	4.30E-02	1.64E+00	6.02E-02	4.30E-02	1.64E+00	1.15E+01	1.16E+01	4
212	17.355	23.859	5	4.86E-02	1.74E+00	6.80E-02	4.86E-02	1.74E+00	1.22E+01	1.23E+01	4
213	17.275	23.713	5	3.29E-02	1.37E+00	4.61E-02	3.29E-02	1.37E+00	9.64E+00	9.68E+00	4
214	18.619	23.957	5	1.51E-01	1.78E+01	2.11E-01	1.51E-01	1.78E+01	1.25E+02	1.25E+02	8
215	18.642	24.090	5	1.55E-01	1.89E+01	2.17E-01	1.55E-01	1.89E+01	1.33E+02	1.33E+02	8
216	18.700	23.951	5	1.43E-01	1.91E+01	2.00E-01	1.43E-01	1.91E+01	1.34E+02	1.34E+02	8
217	17.997	22.157	5	1.10E-01	5.59E+00	1.54E-01	1.10E-01	5.59E+00	3.93E+01	3.94E+01	6
218	18.129	22.348	5	8.85E-02	6.90E+00	1.24E-01	8.85E-02	6.90E+00	4.84E+01	4.85E+01	6
219	18.331	22.261	5	9.77E-02	8.47E+00	1.37E-01	9.77E-02	8.47E+00	5.94E+01	5.96E+01	7
220	18.528	23.774	5	1.68E-01	1.54E+01	2.35E-01	1.68E-01	1.54E+01	1.08E+02	1.08E+02	8
221	18.643	27.723	5	2.67E-01	5.08E+01	3.74E-01	2.67E-01	5.08E+01	3.56E+02	3.56E+02	8
222	18.654	27.351	5	2.85E-01	4.88E+01	3.99E-01	2.85E-01	4.88E+01	3.42E+02	3.42E+02	8
223	19.907	25.684	5	3.03E-01	3.80E+01	4.24E-01	3.03E-01	3.80E+01	2.66E+02	2.67E+02	8
224	18.748	27.965	5	3.68E-01	7.03E+01	5.15E-01	3.68E-01	7.03E+01	4.93E+02	4.93E+02	8
225	18.260	27.647	5	8.56E-02	1.31E+01	1.20E-01	8.56E-02	1.31E+01	9.18E+01	9.19E+01	8
226	19.404	26.126	5	5.05E-01	6.10E+01	7.07E-01	5.05E-01	6.10E+01	4.28E+02	4.28E+02	8
227	19.797	26.424	5	3.97E-01	5.67E+01	5.56E-01	3.97E-01	5.67E+01	3.97E+02	3.98E+02	8
228	19.688	26.010	5	3.62E-01	5.27E+01	5.07E-01	3.62E-01	5.27E+01	3.69E+02	3.70E+02	8
229	18.608	25.375	5	2.26E-01	2.68E+01	3.16E-01	2.26E-01	2.68E+01	1.88E+02	1.88E+02	8
230	18.643	25.342	5	2.43E-01	2.77E+01	3.40E-01	2.43E-01	2.77E+01	1.94E+02	1.95E+02	8
235	17.540	26.653	5	1.74E-02	1.15E+00	2.44E-02	1.74E-02	1.15E+00	8.07E+00	8.10E+00	4
238	18.533	24.214	5	1.47E-01	1.76E+01	2.06E-01	1.47E-01	1.76E+01	1.23E+02	1.24E+02	8
239	18.727	24.309	5	1.93E-01	2.19E+01	2.70E-01	1.93E-01	2.19E+01	1.54E+02	1.54E+02	8
240	17.624	26.382	5	5.13E-02	2.16E+00	7.18E-02	5.13E-02	2.16E+00	1.52E+01	1.53E+01	5
241	17.803	26.836	5	5.30E-02	3.35E+00	7.42E-02	5.30E-02	3.35E+00	2.35E+01	2.36E+01	5
242	17.453	26.585	5	8.52E-03	7.23E-01	1.19E-02	8.52E-03	7.23E-01	5.07E+00	5.08E+00	3
243	18.226	22.183	5	8.20E-02	7.44E+00	1.15E-01	8.20E-02	7.44E+00	5.22E+01	5.23E+01	7
244	17.886	26.503	5	9.11E-02	5.22E+00	1.28E-01	9.11E-02	5.22E+00	3.67E+01	3.68E+01	6
245	17.342	26.693	5	1.62E-03	1.69E-01	2.27E-03	1.62E-03	1.69E-01	1.19E+00	1.19E+00	2
246	17.560	26.496	5	2.94E-02	1.51E+00	4.12E-02	2.94E-02	1.51E+00	1.06E+01	1.07E+01	4
247	17.618	26.228	5	5.79E-02	2.31E+00	8.11E-02	5.79E-02	2.31E+00	1.63E+01	1.63E+01	5
248	17.528	26.754	5	1.03E-02	9.22E-01	1.44E-02	1.03E-02	9.22E-01	6.47E+00	6.48E+00	4
249	17.733	26.756	5	5.13E-02	2.57E+00	7.18E-02	5.13E-02	2.57E+00	1.81E+01	1.81E+01	5
250	18.375	22.578	5	1.12E-01	9.60E+00	1.57E-01	1.12E-01	9.60E+00	6.74E+01	6.75E+01	7
251	18.839	24.693	5	2.83E-01	2.73E+01	3.96E-01	2.83E-01	2.73E+01	1.91E+02	1.92E+02	8
252	18.082	22.652	5	1.37E-01	6.94E+00	1.92E-01	1.37E-01	6.94E+00	4.88E+01	4.90E+01	6

Table F4
VX Exposure Estimates
Support Brigade

253	17.471	24.264	5	7.16E-02	2.23E+00	1.00E-01	7.16E-02	2.23E+00	1.57E+01	1.58E+01	5
254	17.479	23.766	5	8.15E-02	2.45E+00	1.14E-01	8.15E-02	2.45E+00	1.73E+01	1.74E+01	5
255	18.303	23.109	5	9.65E-02	1.01E+01	1.35E-01	9.65E-02	1.01E+01	7.08E+01	7.10E+01	7
256	17.694	23.745	5	9.35E-02	4.13E+00	1.31E-01	9.35E-02	4.13E+00	2.90E+01	2.92E+01	5
257	17.825	23.345	5	1.48E-01	5.24E+00	2.07E-01	1.48E-01	5.24E+00	3.69E+01	3.71E+01	6
258	17.872	23.363	5	1.64E-01	5.68E+00	2.30E-01	1.64E-01	5.68E+00	4.00E+01	4.02E+01	6
259	17.464	24.139	5	7.19E-02	2.23E+00	1.01E-01	7.19E-02	2.23E+00	1.57E+01	1.58E+01	5
260	17.671	24.255	5	1.02E-01	3.99E+00	1.43E-01	1.02E-01	3.99E+00	2.81E+01	2.82E+01	5
261	17.537	24.105	5	8.65E-02	2.76E+00	1.21E-01	8.65E-02	2.76E+00	1.94E+01	1.96E+01	5
262	17.535	24.181	5	8.49E-02	2.72E+00	1.19E-01	8.49E-02	2.72E+00	1.92E+01	1.93E+01	5
263	18.375	23.041	5	1.24E-01	1.08E+01	1.74E-01	1.24E-01	1.08E+01	7.58E+01	7.59E+01	8
264	17.946	23.354	5	1.74E-01	6.45E+00	2.44E-01	1.74E-01	6.45E+00	4.54E+01	4.56E+01	6
265	18.322	23.234	5	1.11E-01	1.07E+01	1.55E-01	1.11E-01	1.07E+01	7.51E+01	7.52E+01	8
266	17.871	23.446	5	1.58E-01	5.75E+00	2.21E-01	1.58E-01	5.75E+00	4.05E+01	4.07E+01	6
267	18.457	23.056	5	1.58E-01	1.18E+01	2.21E-01	1.58E-01	1.18E+01	8.28E+01	8.30E+01	8
268	18.912	23.198	5	1.86E-01	1.73E+01	2.60E-01	1.86E-01	1.73E+01	1.21E+02	1.22E+02	8
269	18.847	23.066	5	1.91E-01	1.60E+01	2.67E-01	1.91E-01	1.60E+01	1.12E+02	1.13E+02	8
270	18.931	23.070	5	1.91E-01	1.67E+01	2.67E-01	1.91E-01	1.67E+01	1.17E+02	1.17E+02	8
271	18.815	23.167	5	1.80E-01	1.62E+01	2.52E-01	1.80E-01	1.62E+01	1.14E+02	1.14E+02	8
272	17.654	24.088	5	1.03E-01	3.84E+00	1.44E-01	1.03E-01	3.84E+00	2.70E+01	2.72E+01	5
273	18.388	23.221	5	1.35E-01	1.15E+01	1.89E-01	1.35E-01	1.15E+01	8.07E+01	8.09E+01	8
274	17.554	23.728	5	8.88E-02	3.00E+00	1.24E-01	8.88E-02	3.00E+00	2.11E+01	2.12E+01	5
275	17.659	23.893	5	9.99E-02	3.87E+00	1.40E-01	9.99E-02	3.87E+00	2.72E+01	2.74E+01	5
276	17.445	23.969	5	6.97E-02	2.20E+00	9.76E-02	6.97E-02	2.20E+00	1.55E+01	1.56E+01	5
277	17.554	23.921	5	9.01E-02	2.97E+00	1.26E-01	9.01E-02	2.97E+00	2.09E+01	2.10E+01	5
278	17.752	24.260	5	1.09E-01	4.87E+00	1.53E-01	1.09E-01	4.87E+00	3.42E+01	3.44E+01	6
279	18.479	23.337	5	1.70E-01	1.30E+01	2.38E-01	1.70E-01	1.30E+01	9.12E+01	9.15E+01	8
280	17.642	24.022	5	1.03E-01	3.73E+00	1.44E-01	1.03E-01	3.73E+00	2.63E+01	2.64E+01	5
281	17.580	24.093	5	9.26E-02	3.16E+00	1.30E-01	9.26E-02	3.16E+00	2.22E+01	2.24E+01	5
282	18.448	23.188	5	1.58E-01	1.21E+01	2.21E-01	1.58E-01	1.21E+01	8.49E+01	8.51E+01	8
283	17.536	23.658	5	8.85E-02	2.86E+00	1.24E-01	8.85E-02	2.86E+00	2.01E+01	2.03E+01	5
284	17.455	23.844	5	7.42E-02	2.29E+00	1.04E-01	7.42E-02	2.29E+00	1.61E+01	1.62E+01	5
285	18.364	23.146	5	1.23E-01	1.10E+01	1.72E-01	1.23E-01	1.10E+01	7.72E+01	7.73E+01	8
286	17.668	23.823	5	9.69E-02	3.93E+00	1.36E-01	9.69E-02	3.93E+00	2.76E+01	2.78E+01	5
287	17.953	23.437	5	1.71E-01	6.62E+00	2.39E-01	1.71E-01	6.62E+00	4.66E+01	4.68E+01	6
288	17.572	23.825	5	9.07E-02	3.14E+00	1.27E-01	9.07E-02	3.14E+00	2.21E+01	2.22E+01	5
289	17.538	23.994	5	8.84E-02	2.81E+00	1.24E-01	8.84E-02	2.81E+00	1.98E+01	1.99E+01	5
290	16.804	22.744	1	1.13E-03	3.11E-01	1.58E-03	1.13E-03	3.11E-01	2.18E+00	2.18E+00	2
299	16.908	25.062	5	5.20E-05	1.85E-02	7.28E-05	5.20E-05	1.85E-02	1.30E-01	1.30E-01	1
304	16.564	22.273	5	2.46E-07	6.45E-02	3.44E-07	2.46E-07	6.45E-02	4.52E-01	4.52E-01	2
305	16.527	22.495	5	1.01E-07	2.29E-02	1.41E-07	1.01E-07	2.29E-02	1.60E-01	1.60E-01	1
308	16.645	22.617	5	5.35E-07	1.09E-01	7.49E-07	5.35E-07	1.09E-01	7.63E-01	7.63E-01	2
309	16.760	22.367	5	6.83E-04	2.80E-01	9.56E-04	6.83E-04	2.80E-01	1.96E+00	1.96E+00	2
358	16.830	25.172	5	7.03E-08	0.00E+00	9.84E-08	7.03E-08	0.00E+00	9.84E-08	1.97E-07	1
397	16.906	22.690	5	2.61E-03	5.04E-01	3.65E-03	2.61E-03	5.04E-01	3.53E+00	3.54E+00	3
398	16.833	22.662	5	1.46E-03	3.74E-01	2.04E-03	1.46E-03	3.74E-01	2.62E+00	2.62E+00	2
416	16.932	22.046	5	4.60E-03	5.79E-01	6.44E-03	4.60E-03	5.79E-01	4.06E+00	4.07E+00	3
417	16.754	22.038	5	6.38E-04	2.97E-01	8.93E-04	6.38E-04	2.97E-01	2.08E+00	2.08E+00	2
419	16.952	22.920	5	5.48E-03	5.92E-01	7.67E-03	5.48E-03	5.92E-01	4.15E+00	4.16E+00	3
459	16.557	22.774	5	2.07E-07	3.18E-02	2.90E-07	2.07E-07	3.18E-02	2.23E-01	2.23E-01	1
461	16.578	22.896	5	2.76E-07	2.13E-02	3.86E-07	2.76E-07	2.13E-02	1.49E-01	1.49E-01	1
464	16.909	25.522	5	2.10E-07	1.09E-02	2.94E-07	2.10E-07	1.09E-02	7.63E-02	7.63E-02	1

Case 2: Protected

2 rounds at aimpoint (17.70, 24.20)

58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-01	3.85E+00	3.85E+00	3
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-01	9.03E-01	9.03E-01	2
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.66E-02	6.76E-01	6.76E-01	2
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-01	2.61E+00	2.61E+00	2
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E-01	6.53E+00	6.53E+00	4
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E+00	1.51E+01	1.51E+01	5
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-02	1.11E-01	1.11E-01	1
114	17.357	23.679	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E+01	1.94E+02	1.94E+02	8
116	17.342	23.597	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E+00	1.08E+01	1.08E+01	4
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E+01	3.46E+02	3.46E+02	8
118	17.359	23.524	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-01	3.53E+00	3.53E+00	3
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E+00	1.89E+01	1.89E+01	5
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E+01	2.91E+02	2.91E+02	8
208	17.275	23.609	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-01	3.56E+00	3.56E+00	3
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E+01	4.84E+02	4.84E+02	8

Table F4
VX Exposure Estimates
Support Brigade

213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E+00	2.30E+01	2.30E+01	5
254	17.479	23.766	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E+01	1.72E+02	1.72E+02	8
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+00	9.38E+00	9.38E+00	4
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E+00	2.44E+01	2.44E+01	5
264	17.946	23.354	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E+01	3.63E+02	3.63E+02	8
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E+00	1.07E+01	1.07E+01	4
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E+00	2.46E+01	2.46E+01	5
276	17.445	23.969	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E+01	1.71E+02	1.71E+02	8
277	17.554	23.921	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-01	2.81E+00	2.81E+00	2
283	17.536	23.658	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E+00	2.05E+01	2.05E+01	5
284	17.455	23.844	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E+01	3.93E+02	3.93E+02	8
287	17.953	23.437	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E+01	4.15E+02	4.15E+02	8
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E+00	1.23E+01	1.23E+01	4
289	17.538	23.994	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-02	2.88E-01	2.88E-01	2

VX 500kg TBM
Heavy Attack
Height of Release: 500m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				4 rounds at aimpoint (17.95, 29.00)							
1	18.436	22.418	1	2.20E+00	7.52E+01	3.08E+00	2.20E+00	7.52E+01	5.29E+02	5.33E+02	8
3	17.181	23.524	2	5.17E-02	6.15E-01	7.24E-02	5.17E-02	6.15E-01	4.38E+00	4.45E+00	3
4	18.493	25.220	3	7.38E-01	1.15E+01	1.03E+00	7.38E-01	1.15E+01	8.15E+01	8.26E+01	8
8	17.462	26.876	5	2.06E-01	4.70E-01	2.88E-01	2.06E-01	4.70E-01	3.58E+00	3.87E+00	3
9	17.366	26.775	5	3.42E-02	0.00E+00	4.79E-02	3.42E-02	0.00E+00	4.79E-02	9.58E-02	1
10	18.147	27.560	5	1.67E-01	1.37E+01	2.34E-01	1.67E-01	1.37E+01	9.61E+01	9.64E+01	8
11	17.742	26.629	5	6.92E-01	5.86E+01	9.69E-01	6.92E-01	5.86E+01	4.11E+02	4.12E+02	8
12	18.130	27.247	5	4.13E-01	2.53E+01	5.78E-01	4.13E-01	2.53E+01	1.78E+02	1.78E+02	8
13	17.460	26.751	5	2.42E-01	7.69E-01	3.39E-01	2.42E-01	7.69E-01	5.72E+00	6.06E+00	4
14	18.595	27.455	5	7.43E-06	0.00E+00	1.04E-05	7.43E-06	0.00E+00	1.04E-05	2.08E-05	1
18	18.420	27.447	5	1.80E-02	0.00E+00	2.52E-02	1.80E-02	0.00E+00	2.52E-02	5.04E-02	1
19	18.212	27.476	5	1.41E-01	9.68E+01	1.97E-01	1.41E-01	9.68E+01	6.78E+02	6.78E+02	8
21	18.222	27.296	5	2.82E-01	9.05E+01	3.95E-01	2.82E-01	9.05E+01	6.34E+02	6.34E+02	8
23	18.087	27.398	5	1.48E-01	7.17E+00	2.07E-01	1.48E-01	7.17E+00	5.04E+01	5.06E+01	7
26	18.329	27.823	5	2.29E-02	0.00E+00	3.21E-02	2.29E-02	0.00E+00	3.21E-02	6.41E-02	1
27	18.712	27.105	5	1.69E-05	0.00E+00	2.37E-05	1.69E-05	0.00E+00	2.37E-05	4.73E-05	1
29	18.374	27.844	5	1.15E-02	0.00E+00	1.61E-02	1.15E-02	0.00E+00	1.61E-02	3.22E-02	1
30	18.405	27.220	5	1.26E-01	0.00E+00	1.76E-01	1.26E-01	0.00E+00	1.76E-01	3.53E-01	2
31	18.118	27.716	5	1.08E-01	2.04E+00	1.51E-01	1.08E-01	2.04E+00	1.44E+01	1.46E+01	4
32	18.658	27.207	5	2.85E-05	0.00E+00	3.99E-05	2.85E-05	0.00E+00	3.99E-05	7.98E-05	1
33	18.081	27.914	5	4.97E-02	0.00E+00	6.96E-02	4.97E-02	0.00E+00	6.96E-02	1.39E-01	1
35	18.597	25.229	5	5.64E-02	1.17E-01	7.90E-02	5.64E-02	1.17E-01	8.98E-01	9.77E-01	2
36	18.520	27.504	5	3.84E-03	0.00E+00	5.38E-03	3.84E-03	0.00E+00	5.38E-03	1.08E-02	1
37	18.503	25.254	5	6.11E-01	7.84E+00	8.55E-01	6.11E-01	7.84E+00	5.57E+01	5.66E+01	7
39	18.591	24.662	5	1.43E-01	2.52E+00	2.00E-01	1.43E-01	2.52E+00	1.78E+01	1.80E+01	5
40	18.651	25.229	5	3.65E-02	0.00E+00	5.11E-02	3.65E-02	0.00E+00	5.11E-02	1.02E-01	1
41	18.896	23.788	5	4.07E-05	0.00E+00	5.70E-05	4.07E-05	0.00E+00	5.70E-05	1.14E-04	1
42	18.853	24.109	5	5.32E-05	0.00E+00	7.45E-05	5.32E-05	0.00E+00	7.45E-05	1.49E-04	1
43	18.892	24.476	5	2.23E-05	0.00E+00	3.12E-05	2.23E-05	0.00E+00	3.12E-05	6.24E-05	1
44	18.936	24.319	5	6.23E-06	0.00E+00	8.72E-06	6.23E-06	0.00E+00	8.72E-06	1.74E-05	1
45	18.777	24.732	5	4.95E-05	0.00E+00	6.93E-05	4.95E-05	0.00E+00	6.93E-05	1.39E-04	1
46	18.921	24.089	5	1.63E-05	0.00E+00	2.28E-05	1.63E-05	0.00E+00	2.28E-05	4.56E-05	1
47	17.923	22.204	5	2.96E+00	1.05E+02	4.14E+00	2.96E+00	1.05E+02	7.39E+02	7.43E+02	8
48	17.187	23.651	5	5.65E-02	5.86E-01	7.91E-02	5.65E-02	5.86E-01	4.18E+00	4.26E+00	3
49	17.468	24.443	5	1.02E+00	3.60E+01	1.43E+00	1.02E+00	3.60E+01	2.53E+02	2.55E+02	8
50	17.487	24.398	5	1.17E+00	4.42E+01	1.64E+00	1.17E+00	4.42E+01	3.11E+02	3.13E+02	8
51	18.556	25.363	5	5.49E-02	1.11E+00	7.69E-02	5.49E-02	1.11E+00	7.85E+00	7.92E+00	4
52	17.293	24.340	5	1.16E-01	2.15E+00	1.62E-01	1.16E-01	2.15E+00	1.52E+01	1.54E+01	5
53	17.202	24.669	5	2.85E-02	0.00E+00	3.99E-02	2.85E-02	0.00E+00	3.99E-02	7.98E-02	1
54	17.418	24.675	5	6.23E-01	1.71E+01	8.72E-01	6.23E-01	1.71E+01	1.21E+02	1.21E+02	8
55	17.339	24.697	5	9.93E-02	3.79E+00	1.39E-01	9.93E-02	3.79E+00	2.67E+01	2.68E+01	5
56	17.274	24.597	5	7.50E-02	7.76E-01	1.05E-01	7.50E-02	7.76E-01	5.54E+00	5.64E+00	3
57	17.347	24.131	5	1.96E-01	7.81E+00	2.74E-01	1.96E-01	7.81E+00	5.49E+01	5.52E+01	7

Table F4
VX Exposure Estimates
Support Brigade

58	17.336	24.001	5	2.12E-01	8.00E+00	2.97E-01	2.12E-01	8.00E+00	5.63E+01	5.66E+01	7
59	17.205	23.842	5	7.23E-02	5.39E-01	1.01E-01	7.23E-02	5.39E-01	3.87E+00	3.98E+00	3
60	17.421	24.329	5	6.88E-01	2.11E+01	9.63E-01	6.88E-01	2.11E+01	1.49E+02	1.50E+02	8
61	17.701	26.488	5	7.67E-01	1.21E+02	1.07E+00	7.67E-01	1.21E+02	8.48E+02	8.49E+02	8
62	17.464	26.662	5	2.80E-01	1.58E+00	3.92E-01	2.80E-01	1.58E+00	1.15E+01	1.18E+01	4
63	18.818	24.344	5	5.75E-05	0.00E+00	8.05E-05	5.75E-05	0.00E+00	8.05E-05	1.61E-04	1
64	18.630	24.478	5	1.33E-01	1.21E+00	1.86E-01	1.33E-01	1.21E+00	8.66E+00	8.84E+00	4
65	18.806	24.225	5	6.93E-05	0.00E+00	9.70E-05	6.93E-05	0.00E+00	9.70E-05	1.94E-04	1
66	18.725	24.470	5	2.81E-02	0.00E+00	3.93E-02	2.81E-02	0.00E+00	3.93E-02	7.87E-02	1
67	18.548	24.460	5	2.53E-01	9.01E+00	3.54E-01	2.53E-01	9.01E+00	6.34E+01	6.38E+01	7
68	17.659	26.754	5	5.22E-01	1.48E+02	7.31E-01	5.22E-01	1.48E+02	1.04E+03	1.04E+03	8
69	17.555	26.861	5	3.80E-01	2.82E+01	5.32E-01	3.80E-01	2.82E+01	1.98E+02	1.98E+02	8
70	18.282	22.390	5	3.87E+00	1.56E+02	5.42E+00	3.87E+00	1.56E+02	1.10E+03	1.10E+03	8
71	17.598	26.569	5	6.00E-01	1.01E+02	8.40E-01	6.00E-01	1.01E+02	7.08E+02	7.09E+02	8
72	17.445	26.254	5	3.91E-01	2.59E+00	5.47E-01	3.91E-01	2.59E+00	1.87E+01	1.92E+01	5
73	17.815	26.257	5	7.89E-01	1.67E+01	1.10E+00	7.89E-01	1.67E+01	1.18E+02	1.19E+02	8
74	17.693	26.866	5	4.61E-01	1.17E+02	6.45E-01	4.61E-01	1.17E+02	8.20E+02	8.20E+02	8
75	17.678	26.639	5	6.24E-01	1.34E+02	8.74E-01	6.24E-01	1.34E+02	9.39E+02	9.40E+02	8
76	17.409	26.724	5	1.35E-01	1.44E-02	1.89E-01	1.35E-01	1.44E-02	2.90E-01	4.79E-01	2
77	17.784	26.491	5	7.05E-01	2.69E+01	9.87E-01	7.05E-01	2.69E+01	1.89E+02	1.90E+02	8
78	17.875	26.374	5	5.05E-01	1.77E+00	7.07E-01	5.05E-01	1.77E+00	1.31E+01	1.38E+01	4
79	18.238	22.525	5	4.25E+00	1.76E+02	5.95E+00	4.25E+00	1.76E+02	1.24E+03	1.24E+03	8
80	18.435	22.682	5	2.19E+00	7.48E+01	3.07E+00	2.19E+00	7.48E+01	5.27E+02	5.30E+02	8
81	17.870	26.656	5	3.27E-01	4.03E-01	4.58E-01	3.27E-01	4.03E-01	3.28E+00	3.74E+00	3
82	17.332	26.414	5	2.16E-04	0.00E+00	3.02E-04	2.16E-04	0.00E+00	3.02E-04	6.05E-04	1
83	18.456	22.521	5	1.93E+00	6.47E+01	2.70E+00	1.93E+00	6.47E+01	4.56E+02	4.58E+02	8
84	17.736	26.324	5	9.34E-01	8.05E+01	1.31E+00	9.34E-01	8.05E+01	5.65E+02	5.66E+02	8
85	17.884	22.396	5	2.72E+00	9.19E+01	3.81E+00	2.72E+00	9.19E+01	6.47E+02	6.51E+02	8
86	17.487	26.466	5	4.39E-01	7.49E+00	6.15E-01	4.39E-01	7.49E+00	5.30E+01	5.37E+01	7
87	17.977	22.662	5	3.31E+00	1.25E+02	4.63E+00	3.31E+00	1.25E+02	8.80E+02	8.84E+02	8
88	18.843	24.530	5	3.89E-05	0.00E+00	5.45E-05	3.89E-05	0.00E+00	5.45E-05	1.09E-04	1
89	18.290	22.615	5	3.83E+00	1.56E+02	5.36E+00	3.83E+00	1.56E+02	1.10E+03	1.10E+03	8
90	18.430	22.295	5	2.29E+00	7.84E+01	3.21E+00	2.29E+00	7.84E+01	5.52E+02	5.55E+02	8
91	17.898	22.639	5	2.76E+00	9.61E+01	3.86E+00	2.76E+00	9.61E+01	6.77E+02	6.80E+02	8
92	18.185	22.679	5	4.74E+00	1.85E+02	6.64E+00	4.74E+00	1.85E+02	1.30E+03	1.31E+03	8
93	17.348	26.251	5	2.85E-04	0.00E+00	3.99E-04	2.85E-04	0.00E+00	3.99E-04	7.98E-04	1
94	17.418	26.441	5	2.25E-01	4.39E-01	3.15E-01	2.25E-01	4.39E-01	3.39E+00	3.70E+00	3
95	17.937	26.836	5	1.01E-01	4.20E-01	1.41E-01	1.01E-01	4.20E-01	3.08E+00	3.22E+00	3
96	18.540	25.208	5	1.93E-01	3.42E+00	2.70E-01	1.93E-01	3.42E+00	2.42E+01	2.45E+01	5
97	18.546	25.327	5	1.06E-01	1.90E+00	1.48E-01	1.06E-01	1.90E+00	1.34E+01	1.36E+01	4
98	17.590	26.733	5	4.82E-01	8.28E+01	6.75E-01	4.82E-01	8.28E+01	5.80E+02	5.81E+02	8
99	17.775	26.941	5	3.85E-01	1.51E+01	5.39E-01	3.85E-01	1.51E+01	1.06E+02	1.07E+02	8
100	17.232	23.912	5	1.01E-01	1.07E+00	1.41E-01	1.01E-01	1.07E+00	7.63E+00	7.77E+00	4
101	17.439	24.597	5	7.90E-01	2.39E+01	1.11E+00	7.90E-01	2.39E+01	1.68E+02	1.70E+02	8
102	17.175	24.255	5	2.20E-02	0.00E+00	3.08E-02	2.20E-02	0.00E+00	3.08E-02	6.16E-02	1
103	17.359	24.059	5	2.79E-01	1.06E+01	3.91E-01	2.79E-01	1.06E+01	7.46E+01	7.50E+01	7
104	17.452	24.521	5	8.96E-01	2.86E+01	1.25E+00	8.96E-01	2.86E+01	2.01E+02	2.03E+02	8
105	17.223	23.804	5	9.90E-02	1.01E+00	1.39E-01	9.90E-02	1.01E+00	7.21E+00	7.35E+00	4
106	17.181	24.103	5	3.19E-02	3.98E-02	4.47E-02	3.19E-02	3.98E-02	3.23E-01	3.68E-01	2
107	17.369	24.259	5	3.14E-01	1.03E+01	4.40E-01	3.14E-01	1.03E+01	7.25E+01	7.30E+01	7
108	17.177	24.439	5	1.98E-02	0.00E+00	2.77E-02	1.98E-02	0.00E+00	2.77E-02	5.54E-02	1
109	17.196	24.503	5	3.13E-02	0.00E+00	4.38E-02	3.13E-02	0.00E+00	4.38E-02	8.76E-02	1
110	17.283	23.842	5	1.75E-01	3.59E+00	2.45E-01	1.75E-01	3.59E+00	2.54E+01	2.56E+01	5
111	17.266	23.993	5	1.33E-01	2.34E+00	1.86E-01	1.33E-01	2.34E+00	1.66E+01	1.68E+01	5
112	17.244	24.171	5	8.95E-02	8.11E-01	1.25E-01	8.95E-02	8.11E-01	5.80E+00	5.93E+00	3
113	17.262	24.275	5	9.64E-02	1.16E+00	1.35E-01	9.64E-02	1.16E+00	8.25E+00	8.39E+00	4
114	17.357	23.679	5	3.45E-01	1.14E+01	4.83E-01	3.45E-01	1.14E+01	8.03E+01	8.08E+01	8
115	17.323	24.549	5	1.11E-01	3.40E+00	1.55E-01	1.11E-01	3.40E+00	2.40E+01	2.41E+01	5
116	17.342	23.597	5	3.04E-01	9.65E+00	4.26E-01	3.04E-01	9.65E+00	6.80E+01	6.84E+01	7
117	17.349	23.785	5	2.74E-01	9.55E+00	3.84E-01	2.74E-01	9.55E+00	6.72E+01	6.76E+01	7
118	17.359	23.524	5	3.90E-01	1.26E+01	5.46E-01	3.90E-01	1.26E+01	8.87E+01	8.93E+01	8
119	17.263	24.484	5	7.85E-02	7.06E-01	1.10E-01	7.85E-02	7.06E-01	5.05E+00	5.16E+00	3
120	18.546	23.924	5	4.29E-01	1.57E+01	6.01E-01	4.29E-01	1.57E+01	1.11E+02	1.11E+02	8
121	18.621	23.802	5	2.66E-01	4.66E+00	3.72E-01	2.66E-01	4.66E+00	3.30E+01	3.34E+01	6
122	18.534	24.025	5	5.63E-01	1.85E+01	7.88E-01	5.63E-01	1.85E+01	1.30E+02	1.31E+02	8
123	18.669	23.711	5	1.79E-01	1.88E+00	2.51E-01	1.79E-01	1.88E+00	1.34E+01	1.37E+01	4
124	18.708	24.080	5	6.82E-02	0.00E+00	9.55E-02	6.82E-02	0.00E+00	9.55E-02	1.91E-01	1
125	18.731	23.867	5	3.73E-02	1.23E-01	5.22E-02	3.73E-02	1.23E-01	9.13E-01	9.65E-01	2

Table F4
VX Exposure Estimates
Support Brigade

126	17.927	22.304	5	2.97E+00	1.06E+02	4.16E+00	2.97E+00	1.06E+02	7.46E+02	7.50E+02	8
127	18.068	22.411	5	4.18E+00	1.62E+02	5.85E+00	4.18E+00	1.62E+02	1.14E+03	1.15E+03	8
128	18.221	22.341	5	4.35E+00	1.73E+02	6.09E+00	4.35E+00	1.73E+02	1.22E+03	1.22E+03	8
129	17.950	22.413	5	3.09E+00	1.13E+02	4.33E+00	3.09E+00	1.13E+02	7.95E+02	8.00E+02	8
130	18.113	22.192	5	4.55E+00	1.70E+02	6.37E+00	4.55E+00	1.70E+02	1.20E+03	1.20E+03	8
131	18.022	22.275	5	3.75E+00	1.43E+02	5.25E+00	3.75E+00	1.43E+02	1.01E+03	1.01E+03	8
132	18.150	22.445	5	4.96E+00	1.86E+02	6.94E+00	4.96E+00	1.86E+02	1.31E+03	1.32E+03	8
133	18.565	23.665	5	4.22E-01	1.55E+01	5.91E-01	4.22E-01	1.55E+01	1.09E+02	1.10E+02	8
134	18.225	27.128	5	4.97E-01	1.21E+02	6.96E-01	4.97E-01	1.21E+02	8.48E+02	8.48E+02	8
137	18.697	27.843	5	1.22E-06	0.00E+00	1.71E-06	1.22E-06	0.00E+00	1.71E-06	3.42E-06	1
143	17.185	23.996	5	4.01E-02	9.79E-02	5.61E-02	4.01E-02	9.79E-02	7.41E-01	7.98E-01	2
151	18.507	25.357	5	5.33E-01	5.94E+00	7.46E-01	5.33E-01	5.94E+00	4.23E+01	4.31E+01	6
153	18.624	25.296	5	4.10E-02	0.00E+00	5.74E-02	4.10E-02	0.00E+00	5.74E-02	1.15E-01	1
158	17.797	26.587	5	5.88E-01	1.30E+01	8.23E-01	5.88E-01	1.30E+01	9.18E+01	9.26E+01	8
160	17.812	26.724	5	4.53E-01	5.43E+00	6.34E-01	4.53E-01	5.43E+00	3.86E+01	3.93E+01	6
169	17.864	26.943	5	2.18E-01	0.00E+00	3.05E-01	2.18E-01	0.00E+00	3.05E-01	6.10E-01	2
172	17.953	26.234	5	3.95E-01	2.53E+01	5.53E-01	3.95E-01	2.53E+01	1.78E+02	1.78E+02	8
174	18.250	27.882	5	4.80E-02	0.00E+00	6.72E-02	4.80E-02	0.00E+00	6.72E-02	1.34E-01	1
178	18.548	27.223	5	1.76E-03	0.00E+00	2.46E-03	1.76E-03	0.00E+00	2.46E-03	4.93E-03	1
180	18.355	27.121	5	2.46E-01	1.01E+01	3.44E-01	2.46E-01	1.01E+01	7.10E+01	7.14E+01	7
181	18.384	27.661	5	1.64E-02	0.00E+00	2.30E-02	1.64E-02	0.00E+00	2.30E-02	4.59E-02	1
182	18.585	27.791	5	4.34E-06	0.00E+00	6.08E-06	4.34E-06	0.00E+00	6.08E-06	1.22E-05	1
184	18.050	27.077	5	3.85E-01	9.34E+01	5.39E-01	3.85E-01	9.34E+01	6.54E+02	6.55E+02	8
186	18.456	25.249	5	1.15E+00	2.53E+01	1.61E+00	1.15E+00	2.53E+01	1.79E+02	1.80E+02	8
187	17.885	27.726	5	2.67E+00	8.99E+01	3.74E+00	2.67E+00	8.99E+01	6.33E+02	6.37E+02	8
188	18.802	24.452	5	5.83E-05	0.00E+00	8.16E-05	5.83E-05	0.00E+00	8.16E-05	1.63E-04	1
189	18.711	24.196	5	5.61E-02	0.00E+00	7.85E-02	5.61E-02	0.00E+00	7.85E-02	1.57E-01	1
190	18.650	24.342	5	1.27E-01	7.37E-01	1.78E-01	1.27E-01	7.37E-01	5.34E+00	5.51E+00	3
191	18.361	22.159	5	3.17E+00	1.15E+02	4.44E+00	3.17E+00	1.15E+02	8.09E+02	8.14E+02	8
192	18.459	25.309	5	1.09E+00	2.25E+01	1.53E+00	1.09E+00	2.25E+01	1.59E+02	1.61E+02	8
193	17.263	23.765	5	1.58E-01	2.53E+00	2.21E-01	1.58E-01	2.53E+00	1.79E+01	1.82E+01	5
195	17.552	24.359	5	1.64E+00	7.37E+01	2.30E+00	1.64E+00	7.37E+01	5.18E+02	5.20E+02	8
196	17.329	24.294	5	1.51E-01	5.04E+00	2.11E-01	1.51E-01	5.04E+00	3.55E+01	3.57E+01	6
197	17.350	24.467	5	1.42E-01	5.83E+00	1.99E-01	1.42E-01	5.83E+00	4.10E+01	4.12E+01	6
198	18.347	22.723	5	3.35E+00	1.26E+02	4.69E+00	3.35E+00	1.26E+02	8.87E+02	8.91E+02	8
199	17.470	26.332	5	4.54E-01	6.64E+00	6.36E-01	4.54E-01	6.64E+00	4.71E+01	4.78E+01	6
200	17.542	26.309	5	7.44E-01	4.45E+01	1.04E+00	7.44E-01	4.45E+01	3.13E+02	3.14E+02	8
201	18.562	25.274	5	6.39E-02	1.30E+00	8.95E-02	6.39E-02	1.30E+00	9.19E+00	9.28E+00	4
202	18.502	25.317	5	6.02E-01	7.06E+00	8.43E-01	6.02E-01	7.06E+00	5.03E+01	5.11E+01	7
203	17.342	26.573	5	1.81E-04	0.00E+00	2.53E-04	1.81E-04	0.00E+00	2.53E-04	5.07E-04	1
204	17.183	24.370	5	2.60E-02	0.00E+00	3.64E-02	2.60E-02	0.00E+00	3.64E-02	7.28E-02	1
205	18.626	24.203	5	1.77E-01	2.33E+00	2.48E-01	1.77E-01	2.33E+00	1.66E+01	1.68E+01	5
206	17.314	24.187	5	1.53E-01	4.24E+00	2.14E-01	1.53E-01	4.24E+00	2.99E+01	3.01E+01	6
207	17.355	23.946	5	2.75E-01	1.05E+01	3.85E-01	2.75E-01	1.05E+01	7.39E+01	7.43E+01	7
208	17.275	23.609	5	1.96E-01	3.87E+00	2.74E-01	1.96E-01	3.87E+00	2.74E+01	2.76E+01	5
209	17.266	24.069	5	1.23E-01	2.04E+00	1.72E-01	1.23E-01	2.04E+00	1.45E+01	1.46E+01	4
210	17.248	24.378	5	7.63E-02	4.84E-01	1.07E-01	7.63E-02	4.84E-01	3.49E+00	3.60E+00	3
211	17.359	24.366	5	2.24E-01	7.93E+00	3.14E-01	2.24E-01	7.93E+00	5.58E+01	5.61E+01	7
212	17.355	23.859	5	2.93E-01	1.05E+01	4.10E-01	2.93E-01	1.05E+01	7.39E+01	7.43E+01	7
213	17.275	23.713	5	1.82E-01	3.49E+00	2.55E-01	1.82E-01	3.49E+00	2.47E+01	2.49E+01	5
214	18.619	23.957	5	2.38E-01	4.02E+00	3.33E-01	2.38E-01	4.02E+00	2.85E+01	2.88E+01	5
215	18.642	24.090	5	1.73E-01	1.84E+00	2.42E-01	1.73E-01	1.84E+00	1.31E+01	1.34E+01	4
216	18.700	23.951	5	9.14E-02	1.19E-01	1.28E-01	9.14E-02	1.19E-01	9.61E-01	1.09E+00	2
217	17.997	22.157	5	3.53E+00	1.32E+02	4.94E+00	3.53E+00	1.32E+02	9.29E+02	9.34E+02	8
218	18.129	22.348	5	4.73E+00	1.77E+02	6.62E+00	4.73E+00	1.77E+02	1.25E+03	1.25E+03	8
219	18.331	22.261	5	3.46E+00	1.30E+02	4.84E+00	3.46E+00	1.30E+02	9.15E+02	9.20E+02	8
220	18.528	23.774	5	7.23E-01	2.38E+01	1.01E+00	7.23E-01	2.38E+01	1.68E+02	1.69E+02	8
221	18.643	27.723	5	3.29E-06	0.00E+00	4.61E-06	3.29E-06	0.00E+00	4.61E-06	9.21E-06	1
222	18.654	27.351	5	1.12E-05	0.00E+00	1.57E-05	1.12E-05	0.00E+00	1.57E-05	3.14E-05	1
224	18.748	27.965	5	3.03E-08	0.00E+00	4.24E-08	3.03E-08	0.00E+00	4.24E-08	8.48E-08	1
225	18.260	27.647	5	7.71E-02	4.53E+01	1.08E-01	7.71E-02	4.53E+01	3.17E+02	3.17E+02	8
229	18.608	25.375	5	3.91E-02	0.00E+00	5.47E-02	3.91E-02	0.00E+00	5.47E-02	1.09E-01	1
230	18.643	25.342	5	3.17E-02	0.00E+00	4.44E-02	3.17E-02	0.00E+00	4.44E-02	8.88E-02	1
235	17.540	26.653	5	4.72E-01	2.72E+01	6.61E-01	4.72E-01	2.72E+01	1.91E+02	1.92E+02	8
238	18.533	24.214	5	5.18E-01	1.63E+01	7.25E-01	5.18E-01	1.63E+01	1.15E+02	1.16E+02	8
239	18.727	24.309	5	3.01E-02	0.00E+00	4.21E-02	3.01E-02	0.00E+00	4.21E-02	8.43E-02	1
240	17.624	26.382	5	7.82E-01	1.31E+02	1.09E+00	7.82E-01	1.31E+02	9.18E+02	9.19E+02	8
241	17.803	26.836	5	4.03E-01	4.23E+00	5.64E-01	4.03E-01	4.23E+00	3.02E+01	3.07E+01	6

Table F4
VX Exposure Estimates
Support Brigade

242	17.453	26.585	5	2.78E-01	6.93E-01	3.89E-01	2.78E-01	6.93E-01	5.24E+00	5.63E+00	3
243	18.226	22.183	5	4.28E+00	1.69E+02	5.99E+00	4.28E+00	1.69E+02	1.19E+03	1.19E+03	8
244	17.886	26.503	5	3.73E-01	5.79E-01	5.22E-01	3.73E-01	5.79E-01	4.58E+00	5.10E+00	3
245	17.342	26.693	5	1.56E-04	0.00E+00	2.18E-04	1.56E-04	0.00E+00	2.18E-04	4.37E-04	1
246	17.560	26.496	5	6.25E-01	5.42E+01	8.75E-01	6.25E-01	5.42E+01	3.80E+02	3.81E+02	8
247	17.618	26.228	5	9.06E-01	1.26E+02	1.27E+00	9.06E-01	1.26E+02	8.83E+02	8.85E+02	8
248	17.528	26.754	5	3.90E-01	1.68E+01	5.46E-01	3.90E-01	1.68E+01	1.18E+02	1.19E+02	8
249	17.733	26.756	5	5.77E-01	6.51E+01	8.08E-01	5.77E-01	6.51E+01	4.57E+02	4.57E+02	8
250	18.375	22.578	5	3.00E+00	1.11E+02	4.20E+00	3.00E+00	1.11E+02	7.81E+02	7.85E+02	8
251	18.839	24.693	5	3.34E-05	0.00E+00	4.68E-05	3.34E-05	0.00E+00	4.68E-05	9.35E-05	1
252	18.082	22.652	5	4.35E+00	1.70E+02	6.09E+00	4.35E+00	1.70E+02	1.20E+03	1.20E+03	8
253	17.471	24.264	5	1.06E+00	3.83E+01	1.48E+00	1.06E+00	3.83E+01	2.70E+02	2.71E+02	8
254	17.479	23.766	5	1.15E+00	4.21E+01	1.61E+00	1.15E+00	4.21E+01	2.96E+02	2.98E+02	8
255	18.303	23.109	5	3.74E+00	1.58E+02	5.24E+00	3.74E+00	1.58E+02	1.11E+03	1.12E+03	8
256	17.694	23.745	5	1.82E+00	8.35E+01	2.55E+00	1.82E+00	8.35E+01	5.87E+02	5.90E+02	8
257	17.825	23.345	5	2.25E+00	7.46E+01	3.15E+00	2.25E+00	7.46E+01	5.25E+02	5.29E+02	8
258	17.872	23.363	5	2.45E+00	8.35E+01	3.43E+00	2.45E+00	8.35E+01	5.88E+02	5.91E+02	8
259	17.464	24.139	5	1.02E+00	3.72E+01	1.43E+00	1.02E+00	3.72E+01	2.62E+02	2.63E+02	8
260	17.671	24.255	5	1.76E+00	9.68E+01	2.46E+00	1.76E+00	9.68E+01	6.80E+02	6.83E+02	8
261	17.537	24.105	5	1.55E+00	6.79E+01	2.17E+00	1.55E+00	6.79E+01	4.77E+02	4.80E+02	8
262	17.535	24.181	5	1.54E+00	6.54E+01	2.16E+00	1.54E+00	6.54E+01	4.60E+02	4.62E+02	8
263	18.375	23.041	5	2.96E+00	1.14E+02	4.14E+00	2.96E+00	1.14E+02	8.02E+02	8.06E+02	8
264	17.946	23.354	5	2.78E+00	1.13E+02	3.89E+00	2.78E+00	1.13E+02	7.95E+02	7.99E+02	8
265	18.322	23.234	5	3.56E+00	1.47E+02	4.98E+00	3.56E+00	1.47E+02	1.03E+03	1.04E+03	8
266	17.871	23.446	5	2.42E+00	8.18E+01	3.39E+00	2.42E+00	8.18E+01	5.76E+02	5.79E+02	8
267	18.457	23.056	5	1.85E+00	6.19E+01	2.59E+00	1.85E+00	6.19E+01	4.36E+02	4.38E+02	8
268	18.912	23.198	5	2.98E-03	0.00E+00	4.17E-03	2.98E-03	0.00E+00	4.17E-03	8.34E-03	1
269	18.847	23.066	5	1.33E-02	1.40E-02	1.86E-02	1.33E-02	1.40E-02	1.17E-01	1.35E-01	1
270	18.931	23.070	5	2.43E-03	0.00E+00	3.40E-03	2.43E-03	0.00E+00	3.40E-03	6.80E-03	1
271	18.815	23.167	5	1.22E-02	1.14E-01	1.71E-02	1.22E-02	1.14E-01	8.15E-01	8.32E-01	2
272	17.654	24.088	5	1.76E+00	9.86E+01	2.46E+00	1.76E+00	9.86E+01	6.93E+02	6.95E+02	8
273	18.388	23.221	5	2.77E+00	1.03E+02	3.88E+00	2.77E+00	1.03E+02	7.25E+02	7.29E+02	8
274	17.554	23.728	5	1.63E+00	6.68E+01	2.28E+00	1.63E+00	6.68E+01	4.70E+02	4.72E+02	8
275	17.659	23.893	5	1.77E+00	9.35E+01	2.48E+00	1.77E+00	9.35E+01	6.57E+02	6.59E+02	8
276	17.445	23.969	5	9.02E-01	3.28E+01	1.26E+00	9.02E-01	3.28E+01	2.31E+02	2.32E+02	8
277	17.554	23.921	5	1.64E+00	7.37E+01	2.30E+00	1.64E+00	7.37E+01	5.18E+02	5.20E+02	8
278	17.752	24.260	5	1.84E+00	7.99E+01	2.58E+00	1.84E+00	7.99E+01	5.62E+02	5.64E+02	8
279	18.479	23.337	5	1.52E+00	4.90E+01	2.13E+00	1.52E+00	4.90E+01	3.45E+02	3.47E+02	8
280	17.642	24.022	5	1.75E+00	9.87E+01	2.45E+00	1.75E+00	9.87E+01	6.93E+02	6.96E+02	8
281	17.580	24.093	5	1.68E+00	8.40E+01	2.35E+00	1.68E+00	8.40E+01	5.90E+02	5.93E+02	8
282	18.448	23.188	5	1.96E+00	6.37E+01	2.74E+00	1.96E+00	6.37E+01	4.49E+02	4.51E+02	8
283	17.536	23.658	5	1.53E+00	5.95E+01	2.14E+00	1.53E+00	5.95E+01	4.19E+02	4.21E+02	8
284	17.455	23.844	5	9.82E-01	3.47E+01	1.37E+00	9.82E-01	3.47E+01	2.44E+02	2.46E+02	8
285	18.364	23.146	5	3.11E+00	1.20E+02	4.35E+00	3.11E+00	1.20E+02	8.44E+02	8.49E+02	8
286	17.668	23.823	5	1.78E+00	8.88E+01	2.49E+00	1.78E+00	8.88E+01	6.24E+02	6.27E+02	8
287	17.953	23.437	5	2.79E+00	1.17E+02	3.91E+00	2.79E+00	1.17E+02	8.23E+02	8.27E+02	8
288	17.572	23.825	5	1.66E+00	7.47E+01	2.32E+00	1.66E+00	7.47E+01	5.25E+02	5.28E+02	8
289	17.538	23.994	5	1.56E+00	7.03E+01	2.18E+00	1.56E+00	7.03E+01	4.94E+02	4.96E+02	8
290	16.804	22.744	1	1.51E-06	0.00E+00	2.11E-06	1.51E-06	0.00E+00	2.11E-06	4.23E-06	1
309	16.760	22.367	5	5.95E-07	0.00E+00	8.33E-07	5.95E-07	0.00E+00	8.33E-07	1.67E-06	1
397	16.906	22.690	5	4.71E-06	0.00E+00	6.59E-06	4.71E-06	0.00E+00	6.59E-06	1.32E-05	1
398	16.833	22.662	5	2.60E-06	0.00E+00	3.64E-06	2.60E-06	0.00E+00	3.64E-06	7.28E-06	1
416	16.932	22.046	5	1.72E-05	0.00E+00	2.41E-05	1.72E-05	0.00E+00	2.41E-05	4.82E-05	1
417	16.754	22.038	5	3.82E-07	0.00E+00	5.35E-07	3.82E-07	0.00E+00	5.35E-07	1.07E-06	1
419	16.952	22.920	5	1.28E-04	0.00E+00	1.79E-04	1.28E-04	0.00E+00	1.79E-04	3.58E-04	1

Case 2: Protected 4 rounds at aimpoint (17.55, 25.50)

52	17.293	24.340	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E+01	1.60E+02	1.60E+02	8
53	17.202	24.669	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+00	8.40E+00	8.40E+00	4
55	17.339	24.697	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-02	1.97E-01	1.97E-01	1
56	17.274	24.597	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E+01	3.18E+02	3.18E+02	8
57	17.347	24.131	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E+00	1.46E+01	1.46E+01	4
58	17.336	24.001	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E+00	4.82E+01	4.82E+01	6
59	17.205	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E+00	4.68E+01	4.68E+01	6
100	17.232	23.912	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E+01	1.68E+02	1.68E+02	8
102	17.175	24.255	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E+00	2.42E+01	2.42E+01	5
103	17.359	24.059	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-01	1.94E+00	1.94E+00	2
105	17.223	23.804	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.84E+00	6.19E+01	6.19E+01	7
106	17.181	24.103	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+01	7.21E+01	7.21E+01	7

Table F4
VX Exposure Estimates
Support Brigade

107	17.369	24.259	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-02	2.46E-01	2.46E-01	1
108	17.177	24.439	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E+00	8.19E+00	8.19E+00	4
109	17.196	24.503	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E+00	8.54E+00	8.54E+00	4
110	17.283	23.842	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E+01	8.82E+01	8.82E+01	8
111	17.266	23.993	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E+01	3.62E+02	3.62E+02	8
112	17.244	24.171	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E+01	6.00E+02	6.00E+02	8
113	17.262	24.275	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E+01	4.41E+02	4.41E+02	8
115	17.323	24.549	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E+00	2.44E+01	2.44E+01	5
117	17.349	23.785	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-01	2.41E+00	2.41E+00	2
119	17.263	24.484	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E+02	8.19E+02	8.19E+02	8
143	17.185	23.996	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E+00	5.84E+01	5.84E+01	7
193	17.263	23.765	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E+00	5.51E+01	5.51E+01	7
196	17.329	24.294	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E+00	3.89E+01	3.89E+01	6
204	17.183	24.370	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E+00	1.43E+01	1.43E+01	4
206	17.314	24.187	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E+01	1.26E+02	1.26E+02	8
207	17.355	23.946	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.54E-01	3.18E+00	3.18E+00	3
209	17.266	24.069	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E+01	5.24E+02	5.24E+02	8
210	17.248	24.378	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E+02	7.28E+02	7.28E+02	8
212	17.355	23.859	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-01	2.87E+00	2.87E+00	2
213	17.275	23.713	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
256	17.694	23.745	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+01	7.21E+01	7.21E+01	7
257	17.825	23.345	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E+00	2.58E+01	2.58E+01	5
258	17.872	23.363	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E+00	2.86E+01	2.86E+01	5
264	17.946	23.354	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-01	4.32E+00	4.32E+00	3
266	17.871	23.446	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E+00	6.65E+01	6.65E+01	7
272	17.654	24.088	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+00	9.38E+00	9.38E+00	4
274	17.554	23.728	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-01	1.21E+00	1.21E+00	2
275	17.659	23.893	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E+01	1.47E+02	1.47E+02	8
278	17.752	24.260	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E+00	2.49E+01	2.49E+01	5
280	17.642	24.022	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E+00	5.57E+01	5.57E+01	7
286	17.668	23.823	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E+01	1.76E+02	1.76E+02	8
287	17.953	23.437	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-01	6.75E+00	6.75E+00	4
288	17.572	23.825	5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-01	2.90E+00	2.90E+00	2

Table F5
HD Exposure Estimates
Support Brigade

Mustard (HD) 152mm Artillery
Light Attack
Release Height: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (17.30, 24.00)									
58	17.336	24.001	5	9.59E+00	2.62E+01	4.70E+01	2	1	2
100	17.232	23.912	5	4.66E-06	0.00E+00	4.66E-06	1	1	1
103	17.359	24.059	5	5.40E+01	8.39E+00	6.60E+01	3	2	2
110	17.283	23.842	5	2.06E+02	3.01E+03	4.51E+03	6	5	8
111	17.266	23.993	5	5.58E+02	1.87E+03	3.23E+03	6	6	7
114	17.357	23.679	5	1.67E+01	4.16E+01	7.61E+01	2	1	2
116	17.342	23.597	5	9.44E+00	3.72E+01	6.26E+01	2	1	2
117	17.349	23.785	5	6.16E+01	3.04E+02	4.96E+02	3	2	4
118	17.359	23.524	5	1.79E+00	5.26E+00	9.30E+00	1	1	1
193	17.263	23.765	5	1.46E+01	5.29E+01	9.02E+01	2	1	2
207	17.355	23.946	5	2.97E+02	3.59E+02	8.10E+02	6	6	6
208	17.275	23.609	5	8.74E+00	3.47E+01	5.83E+01	2	1	2
209	17.266	24.069	5	1.75E+02	6.72E+02	1.14E+03	6	5	6
212	17.355	23.859	5	2.47E+02	1.92E+02	5.21E+02	6	5	5
213	17.275	23.713	5	3.10E+01	1.31E+02	2.18E+02	2	1	3

**Case 2a: Protected (Eye,
Respiratory Exposure)**

18 rounds at aimpoint (12.30, 25.05)									
335	12.388	24.926	5	3.67E-01	8.61E+02	3.67E-01	1	1	
342	12.402	24.713	5	0.00E+00	8.29E-01	0.00E+00	1	1	

**Case 2b: Protected (Skin
Exposure)**

18 rounds at aimpoint (12.30, 25.05)									
335	12.388	24.926	5	4.74E+00	2.46E+03	3.52E+03			7
342	12.402	24.713	5	2.65E-05	2.38E+00	3.40E+00			1

Mustard (HD) MRLS
Medium Attack
Release Height: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (17.55, 28.10)									
3	17.181	23.524	2	1.03E+01	0.00E+00	1.03E+01	2	1	1
8	17.462	26.876	5	1.12E+02	2.22E-01	1.12E+02	5	4	3
9	17.366	26.775	5	9.08E+01	0.00E+00	9.08E+01	4	3	2
11	17.742	26.629	5	1.32E+02	0.00E+00	1.32E+02	5	4	3
13	17.460	26.751	5	1.21E+02	0.00E+00	1.21E+02	5	4	3
47	17.923	22.204	5	8.59E+00	0.00E+00	8.59E+00	2	1	1
48	17.187	23.651	5	1.16E+01	0.00E+00	1.16E+01	2	1	1
49	17.468	24.443	5	9.98E+01	0.00E+00	9.98E+01	4	3	2
50	17.487	24.398	5	1.01E+02	0.00E+00	1.01E+02	5	4	3
52	17.293	24.340	5	4.72E+01	0.00E+00	4.72E+01	2	1	2
53	17.202	24.669	5	1.61E+01	0.00E+00	1.61E+01	2	1	1
54	17.418	24.675	5	9.43E+01	0.00E+00	9.43E+01	4	3	2
55	17.339	24.697	5	6.90E+01	0.00E+00	6.90E+01	3	2	2
56	17.274	24.597	5	4.16E+01	0.00E+00	4.16E+01	2	1	2
57	17.347	24.131	5	6.41E+01	0.00E+00	6.41E+01	3	2	2
58	17.336	24.001	5	5.86E+01	0.00E+00	5.86E+01	3	2	2
59	17.205	23.842	5	1.58E+01	0.00E+00	1.58E+01	2	1	1
60	17.421	24.329	5	8.87E+01	0.00E+00	8.87E+01	4	3	2
61	17.701	26.488	5	1.18E+02	0.00E+00	1.18E+02	5	4	3
62	17.464	26.662	5	1.26E+02	0.00E+00	1.26E+02	5	4	3
68	17.659	26.754	5	1.01E+02	0.00E+00	1.01E+02	5	4	3
69	17.555	26.861	5	1.20E+02	2.19E-01	1.20E+02	5	4	3
71	17.598	26.569	5	1.19E+02	0.00E+00	1.19E+02	5	4	3
72	17.445	26.254	5	1.26E+02	0.00E+00	1.26E+02	5	4	3
73	17.815	26.257	5	9.12E+01	0.00E+00	9.12E+01	4	3	2
74	17.693	26.866	5	1.01E+02	7.65E-02	1.01E+02	5	4	3
75	17.678	26.639	5	1.09E+02	0.00E+00	1.09E+02	5	4	3
76	17.409	26.724	5	1.14E+02	0.00E+00	1.14E+02	5	4	3
77	17.784	26.491	5	1.16E+02	0.00E+00	1.16E+02	5	4	3

Table F5
HD Exposure Estimates
Support Brigade

78	17.875	26.374	5	3.83E+01	0.00E+00	3.83E+01	2	1	2
81	17.870	26.656	5	4.21E+01	0.00E+00	4.21E+01	2	1	2
82	17.332	26.414	5	8.37E+01	0.00E+00	8.37E+01	4	3	2
84	17.736	26.324	5	1.28E+02	0.00E+00	1.28E+02	5	4	3
85	17.884	22.396	5	1.79E+01	0.00E+00	1.79E+01	2	1	1
86	17.487	26.466	5	1.34E+02	0.00E+00	1.34E+02	5	4	3
87	17.977	22.662	5	3.08E+00	0.00E+00	3.08E+00	1	1	1
91	17.898	22.639	5	1.63E+01	0.00E+00	1.63E+01	2	1	1
93	17.348	26.251	5	8.86E+01	0.00E+00	8.86E+01	4	3	2
94	17.418	26.441	5	1.20E+02	0.00E+00	1.20E+02	5	4	3
95	17.937	26.836	5	1.44E+00	0.00E+00	1.44E+00	1	1	1
98	17.590	26.733	5	1.16E+02	0.00E+00	1.16E+02	5	4	3
99	17.775	26.941	5	1.01E+02	1.13E-01	1.01E+02	5	4	3
100	17.232	23.912	5	2.34E+01	0.00E+00	2.34E+01	2	1	1
101	17.439	24.597	5	9.79E+01	0.00E+00	9.79E+01	4	3	2
102	17.175	24.255	5	1.02E+01	0.00E+00	1.02E+01	2	1	1
103	17.359	24.059	5	6.67E+01	0.00E+00	6.67E+01	3	2	2
104	17.452	24.521	5	9.92E+01	0.00E+00	9.92E+01	4	3	2
105	17.223	23.804	5	2.04E+01	0.00E+00	2.04E+01	2	1	1
106	17.181	24.103	5	1.14E+01	0.00E+00	1.14E+01	2	1	1
107	17.369	24.259	5	7.31E+01	0.00E+00	7.31E+01	4	3	2
108	17.177	24.439	5	1.07E+01	0.00E+00	1.07E+01	2	1	1
109	17.196	24.503	5	1.48E+01	0.00E+00	1.48E+01	2	1	1
110	17.283	23.842	5	3.88E+01	0.00E+00	3.88E+01	2	1	2
111	17.266	23.993	5	3.43E+01	0.00E+00	3.43E+01	2	1	2
112	17.244	24.171	5	2.80E+01	0.00E+00	2.80E+01	2	1	2
113	17.262	24.275	5	3.48E+01	0.00E+00	3.48E+01	2	1	2
114	17.357	23.679	5	6.04E+01	0.00E+00	6.04E+01	3	2	2
115	17.323	24.549	5	6.09E+01	0.00E+00	6.09E+01	3	2	2
116	17.342	23.597	5	5.49E+01	0.00E+00	5.49E+01	3	2	2
117	17.349	23.785	5	6.00E+01	0.00E+00	6.00E+01	3	2	2
118	17.359	23.524	5	5.86E+01	0.00E+00	5.86E+01	3	2	2
119	17.263	24.484	5	3.65E+01	0.00E+00	3.65E+01	2	1	2
126	17.927	22.304	5	8.47E+00	0.00E+00	8.47E+00	2	1	1
129	17.950	22.413	5	5.17E+00	0.00E+00	5.17E+00	2	1	1
131	18.022	22.275	5	2.07E-01	0.00E+00	2.07E-01	1	1	1
143	17.185	23.996	5	1.20E+01	0.00E+00	1.20E+01	2	1	1
158	17.797	26.587	5	1.05E+02	0.00E+00	1.05E+02	5	4	3
160	17.812	26.724	5	8.94E+01	0.00E+00	8.94E+01	4	3	2
169	17.864	26.943	5	4.27E+01	0.00E+00	4.27E+01	2	1	2
172	17.953	26.234	5	7.57E-01	0.00E+00	7.57E-01	1	1	1
187	17.885	22.726	5	2.06E+01	0.00E+00	2.06E+01	2	1	1
193	17.263	23.765	5	3.15E+01	0.00E+00	3.15E+01	2	1	2
195	17.552	24.359	5	1.00E+02	0.00E+00	1.00E+02	5	4	3
196	17.329	24.294	5	6.01E+01	0.00E+00	6.01E+01	3	2	2
197	17.350	24.467	5	7.04E+01	0.00E+00	7.04E+01	4	3	2
199	17.470	26.332	5	1.32E+02	0.00E+00	1.32E+02	5	4	3
200	17.542	26.309	5	1.41E+02	0.00E+00	1.41E+02	5	4	3
203	17.342	26.573	5	8.59E+01	0.00E+00	8.59E+01	4	3	2
204	17.183	24.370	5	1.19E+01	0.00E+00	1.19E+01	2	1	1
206	17.314	24.187	5	5.31E+01	0.00E+00	5.31E+01	3	2	2
207	17.355	23.946	5	6.42E+01	0.00E+00	6.42E+01	3	2	2
208	17.275	23.609	5	3.40E+01	0.00E+00	3.40E+01	2	1	2
209	17.266	24.069	5	3.48E+01	0.00E+00	3.48E+01	2	1	2
210	17.248	24.378	5	3.02E+01	0.00E+00	3.02E+01	2	1	2
211	17.359	24.366	5	7.17E+01	0.00E+00	7.17E+01	4	3	2
212	17.355	23.859	5	6.29E+01	0.00E+00	6.29E+01	3	2	2
213	17.275	23.713	5	3.50E+01	0.00E+00	3.50E+01	2	1	2
217	17.997	22.157	5	5.05E-01	0.00E+00	5.05E-01	1	1	1
235	17.540	26.653	5	1.35E+02	0.00E+00	1.35E+02	5	4	3
240	17.624	26.382	5	1.14E+02	0.00E+00	1.14E+02	5	4	3
241	17.803	26.836	5	8.74E+01	0.00E+00	8.74E+01	4	3	2
242	17.453	26.585	5	1.28E+02	0.00E+00	1.28E+02	5	4	3
244	17.886	26.503	5	2.69E+01	0.00E+00	2.69E+01	2	1	2
245	17.342	26.693	5	8.28E+01	0.00E+00	8.28E+01	4	3	2
246	17.560	26.496	5	1.38E+02	0.00E+00	1.38E+02	5	4	3
247	17.618	26.228	5	1.15E+02	0.00E+00	1.15E+02	5	4	3
248	17.528	26.754	5	1.27E+02	0.00E+00	1.27E+02	5	4	3

Table F5
HD Exposure Estimates
Support Brigade

249	17.733	26.756	5	1.24E+02	0.00E+00	1.24E+02	5	4	3
253	17.471	24.264	5	9.66E+01	0.00E+00	9.66E+01	4	3	2
254	17.479	23.766	5	8.65E+01	0.00E+00	8.65E+01	4	3	2
256	17.694	23.745	5	7.92E+01	0.00E+00	7.92E+01	4	3	2
257	17.825	23.345	5	4.58E+01	0.00E+00	4.58E+01	2	1	2
258	17.872	23.363	5	3.04E+01	0.00E+00	3.04E+01	2	1	2
259	17.464	24.139	5	9.29E+01	0.00E+00	9.29E+01	4	3	2
260	17.671	24.255	5	9.01E+01	0.00E+00	9.01E+01	4	3	2
261	17.537	24.105	5	9.51E+01	0.00E+00	9.51E+01	4	3	2
262	17.535	24.181	5	9.70E+01	0.00E+00	9.70E+01	4	3	2
264	17.946	23.354	5	8.64E+00	0.00E+00	8.64E+00	2	1	1
266	17.871	23.446	5	3.14E+01	0.00E+00	3.14E+01	2	1	2
272	17.654	24.088	5	8.80E+01	0.00E+00	8.80E+01	4	3	2
274	17.554	23.728	5	8.63E+01	0.00E+00	8.63E+01	4	3	2
275	17.659	23.893	5	8.39E+01	0.00E+00	8.39E+01	4	3	2
276	17.445	23.969	5	8.68E+01	0.00E+00	8.68E+01	4	3	2
277	17.554	23.921	5	9.04E+01	0.00E+00	9.04E+01	4	3	2
278	17.752	24.260	5	8.28E+01	0.00E+00	8.28E+01	4	3	2
280	17.642	24.022	5	8.73E+01	0.00E+00	8.73E+01	4	3	2
281	17.580	24.093	5	9.24E+01	0.00E+00	9.24E+01	4	3	2
283	17.536	23.658	5	8.53E+01	0.00E+00	8.53E+01	4	3	2
284	17.455	23.844	5	8.58E+01	0.00E+00	8.58E+01	4	3	2
286	17.668	23.823	5	8.21E+01	0.00E+00	8.21E+01	4	3	2
287	17.953	23.437	5	7.31E+00	0.00E+00	7.31E+00	2	1	1
288	17.572	23.825	5	8.72E+01	0.00E+00	8.72E+01	4	3	2
289	17.538	23.994	5	9.26E+01	0.00E+00	9.26E+01	4	3	2

Case 2a: Protected (Eye,
Respiratory Exposure)

240 rounds at aimpoint (17.50, 25.90)									
49	17.468	24.443	5	2.02E-01	0.00E+00	2.02E-01	1	1	
50	17.487	24.398	5	2.24E-01	0.00E+00	2.24E-01	1	1	
52	17.293	24.340	5	1.18E-03	0.00E+00	1.18E-03	1	1	
53	17.202	24.669	5	1.68E-01	0.00E+00	1.68E-01	1	1	
54	17.418	24.675	5	6.40E+00	0.00E+00	6.40E+00	2	1	
55	17.339	24.697	5	4.64E+00	0.00E+00	4.64E+00	1	1	
56	17.274	24.597	5	1.33E+00	0.00E+00	1.33E+00	1	1	
60	17.421	24.329	5	3.88E-02	0.00E+00	3.88E-02	1	1	
101	17.439	24.597	5	3.49E+00	0.00E+00	3.49E+00	1	1	
104	17.452	24.521	5	8.44E-01	0.00E+00	8.44E-01	1	1	
109	17.196	24.503	5	1.17E-03	0.00E+00	1.17E-03	1	1	
115	17.323	24.549	5	9.43E-01	0.00E+00	9.43E-01	1	1	
119	17.263	24.484	5	1.63E-03	0.00E+00	1.63E-03	1	1	
195	17.552	24.359	5	1.37E-02	0.00E+00	1.37E-02	1	1	
197	17.350	24.467	5	1.64E-02	0.00E+00	1.64E-02	1	1	
211	17.359	24.366	5	2.77E-02	0.00E+00	2.77E-02	1	1	

Case 2b: Protected (Skin
Exposure)

240 rounds at aimpoint (17.50, 25.90)									
3	17.181	23.524	2	1.82E+01	0.00E+00	1.82E+01			1
48	17.187	23.651	5	2.44E+01	0.00E+00	2.44E+01			1
49	17.468	24.443	5	1.23E+02	0.00E+00	1.23E+02			3
50	17.487	24.398	5	1.27E+02	0.00E+00	1.27E+02			3
52	17.293	24.340	5	8.10E+01	0.00E+00	8.10E+01			2
53	17.202	24.669	5	2.93E+01	0.00E+00	2.93E+01			2
54	17.418	24.675	5	1.05E+02	1.85E-01	1.05E+02			3
55	17.339	24.697	5	9.34E+01	0.00E+00	9.34E+01			2
56	17.274	24.597	5	6.76E+01	0.00E+00	6.76E+01			2
57	17.347	24.131	5	1.03E+02	0.00E+00	1.03E+02			3
58	17.336	24.001	5	9.68E+01	0.00E+00	9.68E+01			2
59	17.205	23.842	5	3.59E+01	0.00E+00	3.59E+01			2
60	17.421	24.329	5	1.22E+02	0.00E+00	1.22E+02			3
100	17.232	23.912	5	5.25E+01	0.00E+00	5.25E+01			2
101	17.439	24.597	5	1.10E+02	0.00E+00	1.10E+02			3
102	17.175	24.255	5	2.10E+01	0.00E+00	2.10E+01			1
103	17.359	24.059	5	1.06E+02	0.00E+00	1.06E+02			3
104	17.452	24.521	5	1.17E+02	0.00E+00	1.17E+02			3
105	17.223	23.804	5	4.53E+01	0.00E+00	4.53E+01			2
106	17.181	24.103	5	2.43E+01	0.00E+00	2.43E+01			1
107	17.369	24.259	5	1.12E+02	0.00E+00	1.12E+02			3
108	17.177	24.439	5	2.07E+01	0.00E+00	2.07E+01			1
109	17.196	24.503	5	3.02E+01	0.00E+00	3.02E+01			2
110	17.283	23.842	5	7.33E+01	0.00E+00	7.33E+01			2

Table F5
HD Exposure Estimates
Support Brigade

111	17.266	23.993	5	7.02E+01	0.00E+00	7.02E+01			2
112	17.244	24.171	5	6.28E+01	0.00E+00	6.28E+01			2
113	17.262	24.275	5	7.17E+01	0.00E+00	7.17E+01			2
114	17.357	23.679	5	8.84E+01	0.00E+00	8.84E+01			2
115	17.323	24.549	5	8.93E+01	0.00E+00	8.93E+01			2
116	17.342	23.597	5	7.47E+01	0.00E+00	7.47E+01			2
117	17.349	23.785	5	9.36E+01	0.00E+00	9.36E+01			2
118	17.359	23.524	5	6.98E+01	0.00E+00	6.98E+01			2
119	17.263	24.484	5	6.90E+01	0.00E+00	6.90E+01			2
143	17.185	23.996	5	2.64E+01	0.00E+00	2.64E+01			2
193	17.263	23.765	5	6.36E+01	0.00E+00	6.36E+01			2
195	17.552	24.359	5	1.10E+02	0.00E+00	1.10E+02			3
196	17.329	24.294	5	9.73E+01	0.00E+00	9.73E+01			2
197	17.350	24.467	5	1.05E+02	0.00E+00	1.05E+02			3
204	17.183	24.370	5	2.46E+01	0.00E+00	2.46E+01			1
206	17.314	24.187	5	8.98E+01	0.00E+00	8.98E+01			2
207	17.355	23.946	5	1.03E+02	0.00E+00	1.03E+02			3
208	17.275	23.609	5	5.79E+01	0.00E+00	5.79E+01			2
209	17.266	24.069	5	7.12E+01	0.00E+00	7.12E+01			2
210	17.248	24.378	5	6.55E+01	0.00E+00	6.55E+01			2
211	17.359	24.366	5	1.09E+02	0.00E+00	1.09E+02			3
212	17.355	23.859	5	9.96E+01	0.00E+00	9.96E+01			2
213	17.275	23.713	5	6.61E+01	0.00E+00	6.61E+01			2
253	17.471	24.264	5	1.28E+02	0.00E+00	1.28E+02			3
254	17.479	23.766	5	1.15E+02	0.00E+00	1.15E+02			3
256	17.694	23.745	5	1.05E+02	0.00E+00	1.05E+02			3
257	17.825	23.345	5	1.55E+01	0.00E+00	1.55E+01			1
258	17.872	23.363	5	5.54E+00	0.00E+00	5.54E+00			1
259	17.464	24.139	5	1.28E+02	0.00E+00	1.28E+02			3
260	17.671	24.255	5	1.16E+02	0.00E+00	1.16E+02			3
261	17.537	24.105	5	1.18E+02	0.00E+00	1.18E+02			3
262	17.535	24.181	5	1.18E+02	0.00E+00	1.18E+02			3
264	17.946	23.354	5	1.00E-01	0.00E+00	1.00E-01			1
266	17.871	23.446	5	7.69E+00	0.00E+00	7.69E+00			1
272	17.654	24.088	5	1.11E+02	0.00E+00	1.11E+02			3
274	17.554	23.728	5	9.85E+01	0.00E+00	9.85E+01			2
275	17.659	23.893	5	1.08E+02	0.00E+00	1.08E+02			3
276	17.445	23.969	5	1.24E+02	0.00E+00	1.24E+02			3
277	17.554	23.921	5	1.08E+02	0.00E+00	1.08E+02			3
278	17.752	24.260	5	9.69E+01	0.00E+00	9.69E+01			2
280	17.642	24.022	5	1.07E+02	0.00E+00	1.07E+02			3
281	17.580	24.093	5	1.04E+02	0.00E+00	1.04E+02			3
283	17.536	23.658	5	9.59E+01	0.00E+00	9.59E+01			2
284	17.455	23.844	5	1.19E+02	0.00E+00	1.19E+02			3
286	17.668	23.823	5	1.06E+02	0.00E+00	1.06E+02			3
288	17.572	23.825	5	1.00E+02	0.00E+00	1.00E+02			3
289	17.538	23.994	5	1.15E+02	0.00E+00	1.15E+02			3

Mustard (HD) MRLS

Heavy Attack

Release Height: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (17.90, 30.00)									
1	18.436	22.418	1	6.12E+01	0.00E+00	6.12E+01	3	2	2
3	17.181	23.524	2	8.81E+00	0.00E+00	8.81E+00	2	1	1
4	18.493	25.220	3	3.94E+01	0.00E+00	3.94E+01	2	1	2
8	17.462	26.876	5	1.38E+02	0.00E+00	1.38E+02	5	4	3
9	17.366	26.775	5	7.10E+01	0.00E+00	7.10E+01	4	3	2
10	18.147	27.560	5	1.98E+02	0.00E+00	1.98E+02	6	5	3
11	17.742	26.629	5	2.26E+02	0.00E+00	2.26E+02	6	5	3
12	18.130	27.247	5	2.02E+02	0.00E+00	2.02E+02	6	5	3
13	17.460	26.751	5	1.36E+02	0.00E+00	1.36E+02	5	4	3
14	18.595	27.455	5	4.21E-01	0.00E+00	4.21E-01	1	1	1
18	18.420	27.447	5	8.04E+01	0.00E+00	8.04E+01	4	3	2

Table F5
HD Exposure Estimates
Support Brigade

19	18.212	27.476	5	2.04E+02	0.00E+00	2.04E+02	6	5	3
21	18.222	27.296	5	2.02E+02	0.00E+00	2.02E+02	6	5	3
23	18.087	27.398	5	2.09E+02	0.00E+00	2.09E+02	6	5	3
26	18.329	27.823	5	1.54E+02	0.00E+00	1.54E+02	6	5	3
29	18.374	27.844	5	1.18E+02	0.00E+00	1.18E+02	5	4	3
30	18.405	27.220	5	9.25E+01	0.00E+00	9.25E+01	4	3	2
31	18.118	27.716	5	2.00E+02	0.00E+00	2.00E+02	6	5	3
33	18.081	27.914	5	2.08E+02	0.00E+00	2.08E+02	6	5	3
35	18.597	25.229	5	7.96E+00	0.00E+00	7.96E+00	2	1	1
36	18.520	27.504	5	1.14E+01	0.00E+00	1.14E+01	2	1	1
37	18.503	25.254	5	3.47E+01	0.00E+00	3.47E+01	2	1	2
39	18.591	24.662	5	1.12E+01	0.00E+00	1.12E+01	2	1	1
40	18.651	25.229	5	1.96E+00	0.00E+00	1.96E+00	1	1	1
47	17.923	22.204	5	1.73E+02	0.00E+00	1.73E+02	6	5	3
48	17.187	23.651	5	9.52E+00	0.00E+00	9.52E+00	2	1	1
49	17.468	24.443	5	1.19E+02	0.00E+00	1.19E+02	5	4	3
50	17.487	24.398	5	1.28E+02	0.00E+00	1.28E+02	5	4	3
51	18.556	25.363	5	1.59E+01	0.00E+00	1.59E+01	2	1	1
52	17.293	24.340	5	3.54E+01	0.00E+00	3.54E+01	2	1	2
53	17.202	24.669	5	9.75E+00	0.00E+00	9.75E+00	2	1	1
54	17.418	24.675	5	9.50E+01	0.00E+00	9.50E+01	4	3	2
55	17.339	24.697	5	5.46E+01	0.00E+00	5.46E+01	3	2	2
56	17.274	24.597	5	2.89E+01	0.00E+00	2.89E+01	2	1	2
57	17.347	24.131	5	5.71E+01	0.00E+00	5.71E+01	3	2	2
58	17.336	24.001	5	5.23E+01	0.00E+00	5.23E+01	3	2	2
59	17.205	23.842	5	1.22E+01	0.00E+00	1.22E+01	2	1	1
60	17.421	24.329	5	9.44E+01	0.00E+00	9.44E+01	4	3	2
61	17.701	26.488	5	2.26E+02	0.00E+00	2.26E+02	6	5	3
62	17.464	26.662	5	1.37E+02	0.00E+00	1.37E+02	5	4	3
64	18.630	24.478	5	5.98E+00	0.00E+00	5.98E+00	2	1	1
66	18.725	24.470	5	2.55E-01	0.00E+00	2.55E-01	1	1	1
67	18.548	24.460	5	2.14E+01	0.00E+00	2.14E+01	2	1	1
68	17.659	26.754	5	2.24E+02	0.00E+00	2.24E+02	6	5	3
69	17.555	26.861	5	1.82E+02	0.00E+00	1.82E+02	6	5	3
70	18.282	22.390	5	1.19E+02	0.00E+00	1.19E+02	5	4	3
71	17.598	26.569	5	2.02E+02	0.00E+00	2.02E+02	6	5	3
72	17.445	26.254	5	1.23E+02	0.00E+00	1.23E+02	5	4	3
73	17.815	26.257	5	2.26E+02	0.00E+00	2.26E+02	6	5	3
74	17.693	26.866	5	2.29E+02	0.00E+00	2.29E+02	6	5	3
75	17.678	26.639	5	2.25E+02	0.00E+00	2.25E+02	6	5	3
76	17.409	26.724	5	1.03E+02	0.00E+00	1.03E+02	5	4	3
77	17.784	26.491	5	2.25E+02	0.00E+00	2.25E+02	6	5	3
78	17.875	26.374	5	2.35E+02	0.00E+00	2.35E+02	6	5	3
79	18.238	22.525	5	1.35E+02	0.00E+00	1.35E+02	5	4	3
80	18.435	22.682	5	6.27E+01	0.00E+00	6.27E+01	3	2	2
81	17.870	26.656	5	2.36E+02	0.00E+00	2.36E+02	6	5	3
82	17.332	26.414	5	4.91E+01	0.00E+00	4.91E+01	2	1	2
83	18.456	22.521	5	5.37E+01	0.00E+00	5.37E+01	3	2	2
84	17.736	26.324	5	2.24E+02	0.00E+00	2.24E+02	6	5	3
85	17.884	22.396	5	1.78E+02	0.00E+00	1.78E+02	6	5	3
86	17.487	26.466	5	1.48E+02	0.00E+00	1.48E+02	5	4	3
87	17.977	22.662	5	1.78E+02	0.00E+00	1.78E+02	6	5	3
89	18.290	22.615	5	1.19E+02	0.00E+00	1.19E+02	5	4	3
90	18.430	22.295	5	6.27E+01	0.00E+00	6.27E+01	3	2	2
91	17.898	22.639	5	1.81E+02	0.00E+00	1.81E+02	6	5	3
92	18.185	22.679	5	1.52E+02	0.00E+00	1.52E+02	6	5	3
93	17.348	26.251	5	5.88E+01	0.00E+00	5.88E+01	3	2	2
94	17.418	26.441	5	1.07E+02	0.00E+00	1.07E+02	5	4	3
95	17.937	26.836	5	2.47E+02	0.00E+00	2.47E+02	6	5	3
96	18.540	25.208	5	2.15E+01	0.00E+00	2.15E+01	2	1	1
97	18.546	25.327	5	1.88E+01	0.00E+00	1.88E+01	2	1	1
98	17.590	26.733	5	1.99E+02	0.00E+00	1.99E+02	6	5	3
99	17.775	26.941	5	2.25E+02	0.00E+00	2.25E+02	6	5	3
100	17.232	23.912	5	1.81E+01	0.00E+00	1.81E+01	2	1	1
101	17.439	24.597	5	1.06E+02	0.00E+00	1.06E+02	5	4	3
102	17.175	24.255	5	6.88E+00	0.00E+00	6.88E+00	2	1	1
103	17.359	24.059	5	6.25E+01	0.00E+00	6.25E+01	3	2	2
104	17.452	24.521	5	1.12E+02	0.00E+00	1.12E+02	5	4	3

Table F5
HD Exposure Estimates
Support Brigade

105	17.223	23.804	5	1.63E+01	0.00E+00	1.63E+01	2	1	1
106	17.181	24.103	5	7.95E+00	0.00E+00	7.95E+00	2	1	1
107	17.369	24.259	5	6.79E+01	0.00E+00	6.79E+01	3	2	2
108	17.177	24.439	5	6.88E+00	0.00E+00	6.88E+00	2	1	1
109	17.196	24.503	5	9.30E+00	0.00E+00	9.30E+00	2	1	1
110	17.283	23.842	5	3.24E+01	0.00E+00	3.24E+01	2	1	2
111	17.266	23.993	5	2.71E+01	0.00E+00	2.71E+01	2	1	2
112	17.244	24.171	5	2.03E+01	0.00E+00	2.03E+01	2	1	1
113	17.262	24.275	5	2.54E+01	0.00E+00	2.54E+01	2	1	2
114	17.357	23.679	5	6.03E+01	0.00E+00	6.03E+01	3	2	2
115	17.323	24.549	5	4.76E+01	0.00E+00	4.76E+01	2	1	2
116	17.342	23.597	5	5.37E+01	0.00E+00	5.37E+01	3	2	2
117	17.349	23.785	5	5.70E+01	0.00E+00	5.70E+01	3	2	2
118	17.359	23.524	5	6.07E+01	0.00E+00	6.07E+01	3	2	2
119	17.263	24.484	5	2.54E+01	0.00E+00	2.54E+01	2	1	2
120	18.546	23.924	5	2.30E+01	0.00E+00	2.30E+01	2	1	1
121	18.621	23.802	5	8.00E+00	0.00E+00	8.00E+00	2	1	1
122	18.534	24.025	5	2.70E+01	0.00E+00	2.70E+01	2	1	2
123	18.669	23.711	5	3.07E+00	0.00E+00	3.07E+00	1	1	1
124	18.708	24.080	5	5.70E-01	0.00E+00	5.70E-01	1	1	1
125	18.731	23.867	5	2.98E-01	0.00E+00	2.98E-01	1	1	1
126	17.927	22.304	5	1.75E+02	0.00E+00	1.75E+02	6	5	3
127	18.068	22.411	5	1.68E+02	0.00E+00	1.68E+02	6	5	3
128	18.221	22.341	5	1.38E+02	0.00E+00	1.38E+02	5	4	3
129	17.950	22.413	5	1.76E+02	0.00E+00	1.76E+02	6	5	3
130	18.113	22.192	5	1.58E+02	0.00E+00	1.58E+02	6	5	3
131	18.022	22.275	5	1.69E+02	0.00E+00	1.69E+02	6	5	3
132	18.150	22.445	5	1.57E+02	0.00E+00	1.57E+02	6	5	3
133	18.565	23.665	5	1.87E+01	0.00E+00	1.87E+01	2	1	1
134	18.225	27.128	5	2.00E+02	0.00E+00	2.00E+02	6	5	3
143	17.185	23.996	5	8.69E+00	0.00E+00	8.69E+00	2	1	1
151	18.507	25.357	5	3.28E+01	0.00E+00	3.28E+01	2	1	2
153	18.624	25.296	5	4.60E+00	0.00E+00	4.60E+00	1	1	1
158	17.797	26.587	5	2.25E+02	0.00E+00	2.25E+02	6	5	3
160	17.812	26.724	5	2.26E+02	0.00E+00	2.26E+02	6	5	3
169	17.864	26.943	5	2.36E+02	0.00E+00	2.36E+02	6	5	3
172	17.953	26.234	5	2.39E+02	0.00E+00	2.39E+02	6	5	3
174	18.250	27.882	5	2.08E+02	0.00E+00	2.08E+02	6	5	3
178	18.548	27.223	5	5.31E+00	0.00E+00	5.31E+00	2	1	1
180	18.355	27.121	5	1.33E+02	0.00E+00	1.33E+02	5	4	3
181	18.384	27.661	5	1.11E+02	0.00E+00	1.11E+02	5	4	3
182	18.585	27.791	5	3.27E-01	0.00E+00	3.27E-01	1	1	1
184	18.050	27.077	5	2.22E+02	0.00E+00	2.22E+02	6	5	3
186	18.456	25.249	5	5.81E+01	0.00E+00	5.81E+01	3	2	2
187	17.885	22.726	5	1.83E+02	0.00E+00	1.83E+02	6	5	3
189	18.711	24.196	5	5.02E-01	0.00E+00	5.02E-01	1	1	1
190	18.650	24.342	5	3.69E+00	0.00E+00	3.69E+00	1	1	1
191	18.361	22.159	5	8.78E+01	0.00E+00	8.78E+01	4	3	2
192	18.459	25.309	5	5.66E+01	0.00E+00	5.66E+01	3	2	2
193	17.263	23.765	5	2.64E+01	0.00E+00	2.64E+01	2	1	2
195	17.552	24.359	5	1.57E+02	0.00E+00	1.57E+02	6	5	3
196	17.329	24.294	5	4.99E+01	0.00E+00	4.99E+01	2	1	2
197	17.350	24.467	5	5.91E+01	0.00E+00	5.91E+01	3	2	2
198	18.347	22.723	5	9.84E+01	0.00E+00	9.84E+01	4	3	2
199	17.470	26.332	5	1.38E+02	0.00E+00	1.38E+02	5	4	3
200	17.542	26.309	5	1.74E+02	0.00E+00	1.74E+02	6	5	3
201	18.562	25.274	5	1.51E+01	0.00E+00	1.51E+01	2	1	1
202	18.502	25.317	5	3.48E+01	0.00E+00	3.48E+01	2	1	2
203	17.342	26.573	5	5.44E+01	0.00E+00	5.44E+01	3	2	2
204	17.183	24.370	5	7.86E+00	0.00E+00	7.86E+00	2	1	1
205	18.626	24.203	5	6.88E+00	0.00E+00	6.88E+00	2	1	1
206	17.314	24.187	5	4.35E+01	0.00E+00	4.35E+01	2	1	2
207	17.355	23.946	5	6.02E+01	0.00E+00	6.02E+01	3	2	2
208	17.275	23.609	5	3.00E+01	0.00E+00	3.00E+01	2	1	2
209	17.266	24.069	5	2.70E+01	0.00E+00	2.70E+01	2	1	2
210	17.248	24.378	5	2.09E+01	0.00E+00	2.09E+01	2	1	1
211	17.359	24.366	5	6.34E+01	0.00E+00	6.34E+01	3	2	2
212	17.355	23.859	5	5.99E+01	0.00E+00	5.99E+01	3	2	2

Table F5
HD Exposure Estimates
Support Brigade

213	17.275	23.713	5	3.00E+01	0.00E+00	3.00E+01	2	1	2
214	18.619	23.957	5	8.05E+00	0.00E+00	8.05E+00	2	1	1
215	18.642	24.090	5	5.02E+00	0.00E+00	5.02E+00	2	1	1
216	18.700	23.951	5	7.32E-01	0.00E+00	7.32E-01	1	1	1
217	17.997	22.157	5	1.69E+02	0.00E+00	1.69E+02	6	5	3
218	18.129	22.348	5	1.58E+02	0.00E+00	1.58E+02	6	5	3
219	18.331	22.261	5	9.98E+01	0.00E+00	9.98E+01	4	3	2
220	18.528	23.774	5	2.93E+01	0.00E+00	2.93E+01	2	1	2
221	18.643	27.723	5	1.98E-03	0.00E+00	1.98E-03	1	1	1
225	18.260	27.647	5	2.02E+02	0.00E+00	2.02E+02	6	5	3
229	18.608	25.375	5	6.05E+00	0.00E+00	6.05E+00	2	1	1
230	18.643	25.342	5	2.50E+00	0.00E+00	2.50E+00	1	1	1
235	17.540	26.653	5	1.75E+02	0.00E+00	1.75E+02	6	5	3
238	18.533	24.214	5	2.72E+01	0.00E+00	2.72E+01	2	1	2
239	18.727	24.309	5	2.74E-01	0.00E+00	2.74E-01	1	1	1
240	17.624	26.382	5	2.09E+02	0.00E+00	2.09E+02	6	5	3
241	17.803	26.836	5	2.24E+02	0.00E+00	2.24E+02	6	5	3
242	17.453	26.585	5	1.30E+02	0.00E+00	1.30E+02	5	4	3
243	18.226	22.183	5	1.34E+02	0.00E+00	1.34E+02	5	4	3
244	17.886	26.503	5	2.38E+02	0.00E+00	2.38E+02	6	5	3
245	17.342	26.693	5	5.39E+01	0.00E+00	5.39E+01	3	2	2
246	17.560	26.496	5	1.84E+02	0.00E+00	1.84E+02	6	5	3
247	17.618	26.228	5	2.05E+02	0.00E+00	2.05E+02	6	5	3
248	17.528	26.754	5	1.69E+02	0.00E+00	1.69E+02	6	5	3
249	17.733	26.756	5	2.27E+02	0.00E+00	2.27E+02	6	5	3
250	18.375	22.578	5	8.60E+01	0.00E+00	8.60E+01	4	3	2
252	18.082	22.652	5	1.69E+02	0.00E+00	1.69E+02	6	5	3
253	17.471	24.264	5	1.19E+02	0.00E+00	1.19E+02	5	4	3
254	17.479	23.766	5	1.18E+02	0.00E+00	1.18E+02	5	4	3
255	18.303	23.109	5	1.20E+02	0.00E+00	1.20E+02	5	4	3
256	17.694	23.745	5	1.84E+02	0.00E+00	1.84E+02	6	5	3
257	17.825	23.345	5	1.92E+02	0.00E+00	1.92E+02	6	5	3
258	17.872	23.363	5	1.93E+02	0.00E+00	1.93E+02	6	5	3
259	17.464	24.139	5	1.14E+02	0.00E+00	1.14E+02	5	4	3
260	17.671	24.255	5	1.88E+02	0.00E+00	1.88E+02	6	5	3
261	17.537	24.105	5	1.47E+02	0.00E+00	1.47E+02	5	4	3
262	17.535	24.181	5	1.47E+02	0.00E+00	1.47E+02	5	4	3
263	18.375	23.041	5	8.99E+01	0.00E+00	8.99E+01	4	3	2
264	17.946	23.354	5	1.92E+02	0.00E+00	1.92E+02	6	5	3
265	18.322	23.234	5	1.14E+02	0.00E+00	1.14E+02	5	4	3
266	17.871	23.446	5	1.94E+02	0.00E+00	1.94E+02	6	5	3
267	18.457	23.056	5	5.53E+01	0.00E+00	5.53E+01	3	2	2
272	17.654	24.088	5	1.82E+02	0.00E+00	1.82E+02	6	5	3
273	18.388	23.221	5	8.56E+01	0.00E+00	8.56E+01	4	3	2
274	17.554	23.728	5	1.49E+02	0.00E+00	1.49E+02	5	4	3
275	17.659	23.893	5	1.80E+02	0.00E+00	1.80E+02	6	5	3
276	17.445	23.969	5	1.04E+02	0.00E+00	1.04E+02	5	4	3
277	17.554	23.921	5	1.52E+02	0.00E+00	1.52E+02	6	5	3
278	17.752	24.260	5	2.00E+02	0.00E+00	2.00E+02	6	5	3
279	18.479	23.337	5	4.71E+01	0.00E+00	4.71E+01	2	1	2
280	17.642	24.022	5	1.79E+02	0.00E+00	1.79E+02	6	5	3
281	17.580	24.093	5	1.63E+02	0.00E+00	1.63E+02	6	5	3
282	18.448	23.188	5	5.94E+01	0.00E+00	5.94E+01	3	2	2
283	17.536	23.658	5	1.41E+02	0.00E+00	1.41E+02	5	4	3
284	17.455	23.844	5	1.08E+02	0.00E+00	1.08E+02	5	4	3
285	18.364	23.146	5	9.54E+01	0.00E+00	9.54E+01	4	3	2
286	17.668	23.823	5	1.80E+02	0.00E+00	1.80E+02	6	5	3
287	17.953	23.437	5	1.93E+02	0.00E+00	1.93E+02	6	5	3
288	17.572	23.825	5	1.56E+02	0.00E+00	1.56E+02	6	5	3
289	17.538	23.994	5	1.47E+02	0.00E+00	1.47E+02	5	4	3

720 rounds at aimpoint (17.65, 25.10)

3	17.181	23.524	2	5.73E-02	0.00E+00	5.73E-02	1	1	
48	17.187	23.651	5	4.25E-01	0.00E+00	4.25E-01	1	1	
49	17.468	24.443	5	1.25E+00	2.05E+00	1.25E+00	1	1	
50	17.487	24.398	5	5.04E-01	2.13E+01	5.04E-01	1	1	
52	17.293	24.340	5	4.62E-01	1.11E+02	4.62E-01	1	1	
53	17.202	24.669	5	2.25E-02	4.63E+00	2.25E-02	1	1	
54	17.418	24.675	5	1.88E+00	1.03E+01	1.88E+00	1	1	

Case 2a: Protected (Eye,
Respiratory Exposure)

Table F5
HD Exposure Estimates
Support Brigade

55	17.339	24.697	5	4.44E-02	1.01E+01	4.44E-02	1	1	
56	17.274	24.597	5	1.44E-01	2.65E+01	1.44E-01	1	1	
57	17.347	24.131	5	3.39E-01	5.48E-01	3.39E-01	1	1	
58	17.336	24.001	5	5.66E-01	4.86E-01	5.66E-01	1	1	
59	17.205	23.842	5	5.08E-01	2.32E-01	5.08E-01	1	1	
60	17.421	24.329	5	1.15E+00	6.58E+01	1.15E+00	1	1	
100	17.232	23.912	5	7.01E-01	3.33E+00	7.01E-01	1	1	
101	17.439	24.597	5	2.67E+00	1.35E+02	2.67E+00	1	1	
102	17.175	24.255	5	4.78E-01	1.31E+01	4.78E-01	1	1	
103	17.359	24.059	5	4.76E-01	2.38E-01	4.76E-01	1	1	
104	17.452	24.521	5	2.38E+00	1.30E-01	2.38E+00	1	1	
105	17.223	23.804	5	8.50E-01	1.76E-01	8.50E-01	1	1	
106	17.181	24.103	5	3.54E-01	2.07E+01	3.54E-01	1	1	
107	17.369	24.259	5	1.25E+00	6.31E+00	1.25E+00	1	1	
108	17.177	24.439	5	2.57E-01	9.09E-01	2.57E-01	1	1	
109	17.196	24.503	5	1.23E-01	1.46E+01	1.23E-01	1	1	
110	17.283	23.842	5	1.25E+00	6.87E-01	1.25E+00	1	1	
111	17.266	23.993	5	1.29E+00	8.45E+00	1.29E+00	1	1	
112	17.244	24.171	5	7.40E-01	1.81E+02	7.40E-01	1	1	
113	17.262	24.275	5	5.20E-01	4.81E+01	5.20E-01	1	1	
115	17.323	24.549	5	2.55E-01	5.74E+01	2.55E-01	1	1	
117	17.349	23.785	5	1.91E-02	0.00E+00	1.91E-02	1	1	
119	17.263	24.484	5	3.60E-01	1.55E+00	3.60E-01	1	1	
143	17.185	23.996	5	3.07E-01	2.55E-01	3.07E-01	1	1	
193	17.263	23.765	5	1.17E+00	4.59E-02	1.17E+00	1	1	
195	17.552	24.359	5	1.80E-01	9.36E+00	1.80E-01	1	1	
196	17.329	24.294	5	1.12E+00	3.92E+01	1.12E+00	1	1	
197	17.350	24.467	5	8.40E-01	2.81E+01	8.40E-01	1	1	
204	17.183	24.370	5	2.88E-01	2.11E-01	2.88E-01	1	1	
206	17.314	24.187	5	1.24E+00	1.26E+01	1.24E+00	1	1	
207	17.355	23.946	5	2.23E-01	0.00E+00	2.23E-01	1	1	
208	17.275	23.609	5	4.34E-01	0.00E+00	4.34E-01	1	1	
209	17.266	24.069	5	1.36E+00	3.21E+01	1.36E+00	1	1	
210	17.248	24.378	5	3.85E-01	4.23E+00	3.85E-01	1	1	
211	17.359	24.366	5	1.33E+00	1.47E+01	1.33E+00	1	1	
212	17.355	23.859	5	1.63E-01	0.00E+00	1.63E-01	1	1	
213	17.275	23.713	5	8.35E-01	0.00E+00	8.35E-01	1	1	
253	17.471	24.264	5	6.58E-01	8.13E+01	6.58E-01	1	1	
254	17.479	23.766	5	1.28E+00	2.53E+00	1.28E+00	1	1	
256	17.694	23.745	5	2.90E+00	1.98E+00	2.90E+00	1	1	
257	17.825	23.345	5	1.88E-02	0.00E+00	1.88E-02	1	1	
258	17.872	23.363	5	1.14E-01	0.00E+00	1.14E-01	1	1	
259	17.464	24.139	5	9.74E-01	6.60E+00	9.74E-01	1	1	
260	17.671	24.255	5	3.06E+00	8.06E+01	3.06E+00	1	1	
261	17.537	24.105	5	6.12E-01	5.61E+01	6.12E-01	1	1	
262	17.535	24.181	5	4.92E-01	4.43E+01	4.92E-01	1	1	
264	17.946	23.354	5	1.31E-02	0.00E+00	1.31E-02	1	1	
266	17.871	23.446	5	2.57E-01	0.00E+00	2.57E-01	1	1	
272	17.654	24.088	5	3.47E-01	1.76E+00	3.47E-01	1	1	
274	17.554	23.728	5	2.35E+00	9.86E-01	2.35E+00	1	1	
275	17.659	23.893	5	6.24E-01	1.52E+00	6.24E-01	1	1	
276	17.445	23.969	5	5.92E-01	3.92E+00	5.92E-01	1	1	
277	17.554	23.921	5	1.27E+00	9.19E+00	1.27E+00	1	1	
278	17.752	24.260	5	1.67E+00	3.74E+01	1.67E+00	1	1	
280	17.642	24.022	5	2.99E-02	1.42E+01	2.99E-02	1	1	
281	17.580	24.093	5	2.11E-01	1.66E+02	2.11E-01	1	1	
283	17.536	23.658	5	1.89E+00	3.84E-02	1.89E+00	1	1	
284	17.455	23.844	5	6.80E-01	4.09E+00	6.80E-01	1	1	
286	17.668	23.823	5	1.23E+00	1.66E+00	1.23E+00	1	1	
288	17.572	23.825	5	1.31E+00	5.11E+00	1.31E+00	1	1	
289	17.538	23.994	5	1.22E+00	4.98E+01	1.22E+00	1	1	
720 rounds at aimpoint (17.65, 25.10)									
3	17.181	23.524	2	3.35E+01	0.00E+00	3.35E+01			2
47	17.923	22.204	5	6.19E+00	0.00E+00	6.19E+00			1
48	17.187	23.651	5	4.66E+01	0.00E+00	4.66E+01			2
49	17.468	24.443	5	2.58E+01	6.56E+02	9.63E+02			6
50	17.487	24.398	5	2.44E+01	2.62E+02	3.99E+02			4
52	17.293	24.340	5	2.29E+01	3.41E+02	5.10E+02			5

Case 2b: Protected (Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

53	17.202	24.669	5	1.39E+00	3.45E+02	4.94E+02			4
54	17.418	24.675	5	1.04E+01	7.76E+02	1.12E+03			6
55	17.339	24.697	5	1.03E+01	5.16E+02	7.47E+02			5
56	17.274	24.597	5	8.24E+00	2.45E+02	3.58E+02			4
57	17.347	24.131	5	3.45E+01	5.56E+02	8.29E+02			6
58	17.336	24.001	5	4.09E+01	1.02E+02	1.87E+02			3
59	17.205	23.842	5	5.83E+01	5.43E+00	6.61E+01			2
60	17.421	24.329	5	3.44E+01	8.22E+02	1.21E+03			6
70	18.282	22.390	5	1.19E-01	0.00E+00	1.19E-01			1
79	18.238	22.525	5	1.09E+00	0.00E+00	1.09E+00			1
85	17.884	22.396	5	1.27E+01	0.00E+00	1.27E+01			1
87	17.977	22.662	5	2.35E+01	0.00E+00	2.35E+01			1
89	18.290	22.615	5	2.60E-01	0.00E+00	2.60E-01			1
91	17.898	22.639	5	2.15E+01	0.00E+00	2.15E+01			1
92	18.185	22.679	5	7.89E+00	0.00E+00	7.89E+00			1
100	17.232	23.912	5	5.55E+01	2.61E+01	9.28E+01			2
101	17.439	24.597	5	1.77E+01	1.24E+03	1.79E+03			7
102	17.175	24.255	5	1.57E+01	2.54E+02	3.79E+02			4
103	17.359	24.059	5	4.12E+01	4.01E+02	6.14E+02			5
104	17.452	24.521	5	2.27E+01	7.99E+02	1.16E+03			6
105	17.223	23.804	5	5.81E+01	4.45E+00	6.45E+01			2
106	17.181	24.103	5	2.80E+01	1.60E+02	2.57E+02			4
107	17.369	24.259	5	3.04E+01	1.57E+02	2.55E+02			4
108	17.177	24.439	5	7.42E+00	3.74E+02	5.42E+02			5
109	17.196	24.503	5	5.66E+00	4.86E+02	7.00E+02			5
110	17.283	23.842	5	4.73E+01	4.43E+00	5.36E+01			2
111	17.266	23.993	5	4.59E+01	6.61E+01	1.40E+02			3
112	17.244	24.171	5	3.51E+01	5.72E+02	8.52E+02			6
113	17.262	24.275	5	2.94E+01	2.95E+02	4.51E+02			4
114	17.357	23.679	5	5.67E+01	1.06E+00	5.82E+01			2
115	17.323	24.549	5	1.36E+01	2.67E+02	3.95E+02			4
116	17.342	23.597	5	5.31E+01	0.00E+00	5.31E+01			2
117	17.349	23.785	5	4.89E+01	6.32E+00	5.79E+01			2
118	17.359	23.524	5	6.29E+01	0.00E+00	6.29E+01			2
119	17.263	24.484	5	1.47E+01	3.08E+02	4.55E+02			4
126	17.927	22.304	5	9.82E+00	0.00E+00	9.82E+00			1
127	18.068	22.411	5	1.05E+01	0.00E+00	1.05E+01			1
128	18.221	22.341	5	1.18E+00	0.00E+00	1.18E+00			1
129	17.950	22.413	5	1.43E+01	0.00E+00	1.43E+01			1
130	18.113	22.192	5	2.55E+00	0.00E+00	2.55E+00			1
131	18.022	22.275	5	7.03E+00	0.00E+00	7.03E+00			1
132	18.150	22.445	5	6.56E+00	0.00E+00	6.56E+00			1
143	17.185	23.996	5	3.84E+01	4.21E+01	9.85E+01			2
187	17.885	22.726	5	2.40E+01	0.00E+00	2.40E+01			1
193	17.263	23.765	5	5.31E+01	2.45E+00	5.66E+01			2
195	17.552	24.359	5	4.59E+01	7.02E+02	1.05E+03			6
196	17.329	24.294	5	2.58E+01	2.29E+02	3.53E+02			4
197	17.350	24.467	5	2.05E+01	1.34E+02	2.12E+02			3
198	18.347	22.723	5	1.56E-02	0.00E+00	1.56E-02			1
204	17.183	24.370	5	1.20E+01	6.58E+02	9.52E+02			6
206	17.314	24.187	5	3.23E+01	5.48E+02	8.15E+02			6
207	17.355	23.946	5	4.59E+01	7.02E+01	1.46E+02			3
208	17.275	23.609	5	4.71E+01	0.00E+00	4.71E+01			2
209	17.266	24.069	5	4.08E+01	1.69E+02	2.82E+02			4
210	17.248	24.378	5	2.29E+01	1.38E+02	2.20E+02			3
211	17.359	24.366	5	2.43E+01	4.11E+02	6.11E+02			5
212	17.355	23.859	5	4.98E+01	2.16E+01	8.07E+01			2
213	17.275	23.713	5	4.85E+01	3.28E-01	4.90E+01			2
217	17.997	22.157	5	3.45E+00	0.00E+00	3.45E+00			1
218	18.129	22.348	5	5.33E+00	0.00E+00	5.33E+00			1
219	18.331	22.261	5	2.58E-03	0.00E+00	2.58E-03			1
243	18.226	22.183	5	5.11E-01	0.00E+00	5.11E-01			1
250	18.375	22.578	5	1.22E-03	0.00E+00	1.22E-03			1
252	18.082	22.652	5	1.70E+01	0.00E+00	1.70E+01			1
253	17.471	24.264	5	4.05E+01	9.22E+02	1.36E+03			6
254	17.479	23.766	5	7.03E+01	1.96E+01	9.83E+01			2
255	18.303	23.109	5	1.16E-01	0.00E+00	1.16E-01			1
256	17.694	23.745	5	7.81E+01	8.65E+00	9.05E+01			2

Table F5
HD Exposure Estimates
Support Brigade

257	17.825	23.345	5	5.52E+01	0.00E+00	5.52E+01			2
258	17.872	23.363	5	4.96E+01	0.00E+00	4.96E+01			2
259	17.464	24.139	5	5.16E+01	1.89E+02	3.22E+02			4
260	17.671	24.255	5	4.49E+01	5.60E+02	8.45E+02			6
261	17.537	24.105	5	5.58E+01	2.23E+02	3.74E+02			4
262	17.535	24.181	5	5.07E+01	2.98E+02	4.76E+02			4
264	17.946	23.354	5	6.84E+01	0.00E+00	6.84E+01			2
265	18.322	23.234	5	3.98E-02	0.00E+00	3.98E-02			1
266	17.871	23.446	5	4.93E+01	0.00E+00	4.93E+01			2
272	17.654	24.088	5	6.19E+01	4.29E+02	6.75E+02			5
274	17.554	23.728	5	7.44E+01	4.89E+00	8.14E+01			2
275	17.659	23.893	5	7.15E+01	2.75E+01	1.11E+02			3
276	17.445	23.969	5	6.85E+01	5.60E+01	1.49E+02			3
277	17.554	23.921	5	6.52E+01	1.75E+02	3.15E+02			4
278	17.752	24.260	5	3.12E+01	7.75E+02	1.14E+03			6
280	17.642	24.022	5	6.22E+01	2.94E+02	4.82E+02			4
281	17.580	24.093	5	4.70E+01	1.31E+03	1.92E+03			7
283	17.536	23.658	5	7.51E+01	2.17E+00	7.82E+01			2
284	17.455	23.844	5	7.14E+01	1.59E+01	9.41E+01			2
286	17.668	23.823	5	7.14E+01	8.54E+00	8.36E+01			2
287	17.953	23.437	5	7.61E+01	0.00E+00	7.61E+01			2
288	17.572	23.825	5	6.80E+01	3.85E+01	1.23E+02			3
289	17.538	23.994	5	6.16E+01	4.45E+02	6.97E+02			5
419	16.952	22.920	5	0.012019	0.00E+00	1.20E-02			1

Mustard (HD) 250kg Bomb
Light Attack
Release Height: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (17.40, 24.40)									
3	17.181	23.524	2	0.00E+00	4.07E-01	5.81E-01	1	1	1
48	17.187	23.651	5	0.00E+00	6.29E-01	8.99E-01	1	1	1
50	17.487	24.398	5	4.68E-05	0.00E+00	4.68E-05	1	1	1
52	17.293	24.340	5	9.22E+02	5.60E+03	8.92E+03	6	6	8
57	17.347	24.131	5	8.72E+00	3.75E+01	6.23E+01	2	1	2
58	17.336	24.001	5	1.95E+01	1.19E+02	1.90E+02	2	1	3
59	17.205	23.842	5	1.05E-04	1.15E+00	1.64E+00	1	1	1
100	17.232	23.912	5	4.16E-01	7.67E+00	1.14E+01	1	1	1
103	17.359	24.059	5	1.17E-01	4.18E+00	6.09E+00	1	1	1
105	17.223	23.804	5	5.65E-04	4.43E+00	6.33E+00	1	1	1
107	17.369	24.259	5	1.72E-03	0.00E+00	1.72E-03	1	1	1
110	17.283	23.842	5	6.21E+00	6.48E+01	9.88E+01	2	1	2
111	17.266	23.993	5	1.99E+01	1.27E+02	2.01E+02	2	1	3
112	17.244	24.171	5	6.28E-03	2.55E-02	4.27E-02	1	1	1
113	17.262	24.275	5	1.05E+01	8.98E+01	1.39E+02	2	1	3
114	17.357	23.679	5	1.61E-01	6.27E+00	9.12E+00	1	1	1
116	17.342	23.597	5	6.39E-02	4.86E+00	7.01E+00	1	1	1
117	17.349	23.785	5	1.63E+00	1.85E+01	2.81E+01	1	1	2
118	17.359	23.524	5	0.00E+00	2.05E+00	2.93E+00	1	1	1
193	17.263	23.765	5	2.09E+00	2.50E+01	3.78E+01	1	1	2
195	17.552	24.359	5	7.36E+02	1.82E+03	3.34E+03	6	6	7
196	17.329	24.294	5	1.71E+01	1.48E+02	2.29E+02	2	1	3
206	17.314	24.187	5	5.11E+02	2.76E+03	4.45E+03	6	6	8
207	17.355	23.946	5	1.05E+00	1.73E+01	2.58E+01	1	1	2
208	17.275	23.609	5	2.13E-01	6.84E+00	9.98E+00	1	1	1
209	17.266	24.069	5	4.33E+01	1.87E+02	3.10E+02	2	1	4
210	17.248	24.378	5	1.55E-05	0.00E+00	1.55E-05	1	1	1
211	17.359	24.366	5	1.13E-03	0.00E+00	1.13E-03	1	1	1
212	17.355	23.859	5	1.21E+00	1.77E+01	2.65E+01	1	1	2
213	17.275	23.713	5	1.40E+00	1.81E+01	2.73E+01	1	1	2
254	17.479	23.766	5	1.83E-01	6.59E+00	9.60E+00	1	1	1
256	17.694	23.745	5	0.00E+00	2.65E-02	3.79E-02	1	1	1
261	17.537	24.105	5	6.98E+02	1.06E+03	2.21E+03	6	6	7
262	17.535	24.181	5	4.86E+02	2.35E+03	3.84E+03	6	6	7

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

274	17.554	23.728	5	2.02E+00	2.62E+01	3.94E+01	1	1	2
275	17.659	23.893	5	0.00E+00	8.86E-02	1.27E-01	1	1	1
277	17.554	23.921	5	3.91E+01	1.73E+02	2.86E+02	2	1	4
280	17.642	24.022	5	7.68E-05	1.03E-02	1.48E-02	1	1	1
281	17.580	24.093	5	6.06E+01	2.46E+02	4.12E+02	3	2	4
283	17.536	23.658	5	6.81E-01	1.11E+01	1.65E+01	1	1	1
284	17.455	23.844	5	1.01E-04	1.06E+00	1.51E+00	1	1	1
286	17.668	23.823	5	0.00E+00	1.44E-01	2.06E-01	1	1	1
288	17.572	23.825	5	4.78E+00	5.34E+01	8.11E+01	1	1	2
289	17.538	23.994	5	1.73E+02	3.21E+02	6.32E+02	6	5	5

**Case 2a: Protected (Eye,
Respiratory Exposure)**

2 rounds at aimpoint (17.30, 24.70)

48	17.187	23.651	5	0.00E+00	1.10E-01	0.00E+00	1	1	
49	17.468	24.443	5	5.64E+00	3.73E+02	5.64E+00	2	1	
50	17.487	24.398	5	2.47E-01	5.43E+01	2.47E-01	1	1	
53	17.202	24.669	5	9.43E-02	2.27E+02	9.43E-02	1	1	
54	17.418	24.675	5	4.80E-09	3.50E-04	4.80E-09	1	1	
56	17.274	24.597	5	4.40E-07	0.00E+00	4.40E-07	1	1	
57	17.347	24.131	5	0.00E+00	1.34E-01	0.00E+00	1	1	
58	17.336	24.001	5	0.00E+00	2.01E-01	0.00E+00	1	1	
59	17.205	23.842	5	0.00E+00	1.38E+00	0.00E+00	1	1	
60	17.421	24.329	5	3.28E-01	6.75E+01	3.28E-01	1	1	
100	17.232	23.912	5	0.00E+00	2.12E+00	0.00E+00	1	1	
101	17.439	24.597	5	5.50E+00	3.53E+03	5.50E+00	2	1	
102	17.175	24.255	5	2.10E-01	4.81E+01	2.10E-01	1	1	
103	17.359	24.059	5	0.00E+00	7.59E-01	0.00E+00	1	1	
104	17.452	24.521	5	1.90E+01	2.90E+03	1.90E+01	2	1	
105	17.223	23.804	5	0.00E+00	8.97E-01	0.00E+00	1	1	
106	17.181	24.103	5	5.59E-02	1.54E+01	5.59E-02	1	1	
107	17.369	24.259	5	0.00E+00	2.24E-01	0.00E+00	1	1	
108	17.177	24.439	5	1.83E+00	1.75E+02	1.83E+00	1	1	
109	17.196	24.503	5	1.88E+01	2.08E+03	1.88E+01	2	1	
110	17.283	23.842	5	0.00E+00	4.70E-01	0.00E+00	1	1	
111	17.266	23.993	5	0.00E+00	1.73E+00	0.00E+00	1	1	
112	17.244	24.171	5	2.58E-02	1.11E+01	2.58E-02	1	1	
113	17.262	24.275	5	4.94E-05	3.30E+00	4.94E-05	1	1	
114	17.357	23.679	5	0.00E+00	7.63E-02	0.00E+00	1	1	
117	17.349	23.785	5	0.00E+00	2.17E-01	0.00E+00	1	1	
119	17.263	24.484	5	2.65E-05	0.00E+00	2.65E-05	1	1	
143	17.185	23.996	5	0.00E+00	5.32E+00	0.00E+00	1	1	
193	17.263	23.765	5	0.00E+00	3.86E-01	0.00E+00	1	1	
204	17.183	24.370	5	3.31E+00	1.89E+02	3.31E+00	1	1	
206	17.314	24.187	5	0.00E+00	2.26E-02	0.00E+00	1	1	
207	17.355	23.946	5	0.00E+00	4.51E-01	0.00E+00	1	1	
208	17.275	23.609	5	0.00E+00	1.24E-02	0.00E+00	1	1	
209	17.266	24.069	5	5.18E-06	3.04E+00	5.18E-06	1	1	
210	17.248	24.378	5	3.85E-02	9.31E+00	3.85E-02	1	1	
212	17.355	23.859	5	0.00E+00	3.68E-01	0.00E+00	1	1	
213	17.275	23.713	5	0.00E+00	1.71E-01	0.00E+00	1	1	
253	17.471	24.264	5	3.33E-01	6.03E+01	3.33E-01	1	1	
254	17.479	23.766	5	0.00E+00	5.67E-01	0.00E+00	1	1	
259	17.464	24.139	5	7.83E-02	2.27E+01	7.83E-02	1	1	
261	17.537	24.105	5	0.00E+00	8.93E-01	0.00E+00	1	1	
262	17.535	24.181	5	0.00E+00	6.25E-01	0.00E+00	1	1	
274	17.554	23.728	5	0.00E+00	1.05E-01	0.00E+00	1	1	
276	17.445	23.969	5	0.00E+00	4.36E+00	0.00E+00	1	1	
277	17.554	23.921	5	0.00E+00	2.87E-01	0.00E+00	1	1	
283	17.536	23.658	5	0.00E+00	5.61E-02	0.00E+00	1	1	
284	17.455	23.844	5	0.00E+00	1.40E+00	0.00E+00	1	1	
288	17.572	23.825	5	0.00E+00	1.19E-01	0.00E+00	1	1	
289	17.538	23.994	5	0.00E+00	7.04E-01	0.00E+00	1	1	

**Case 2b: Protected (Skin
Exposure)**

2 rounds at aimpoint (17.30, 24.70)

48	17.187	23.651	5	0.00E+00	3.14E-01	4.49E-01			1
49	17.468	24.443	5	7.55E+01	1.07E+03	1.60E+03			7
50	17.487	24.398	5	5.07E+00	1.55E+02	2.26E+02			3
52	17.293	24.340	5	6.67E-06	0.00E+00	6.67E-06			1
53	17.202	24.669	5	1.58E+00	6.48E+02	9.27E+02			6
54	17.418	24.675	5	1.74E-07	1.00E-03	1.43E-03			1
56	17.274	24.597	5	8.23E-06	0.00E+00	8.23E-06			1

Table F5
HD Exposure Estimates
Support Brigade

57	17.347	24.131	5	0.00E+00	3.82E-01	5.46E-01			1
58	17.336	24.001	5	0.00E+00	5.74E-01	8.20E-01			1
59	17.205	23.842	5	0.00E+00	3.96E+00	5.66E+00			1
60	17.421	24.329	5	7.90E+00	1.93E+02	2.84E+02			4
100	17.232	23.912	5	7.24E-02	6.07E+00	8.74E+00			1
101	17.439	24.597	5	6.42E+01	1.01E+04	1.45E+04			9
102	17.175	24.255	5	3.42E+00	1.38E+02	2.01E+02			3
103	17.359	24.059	5	3.43E-05	2.17E+00	3.10E+00			1
104	17.452	24.521	5	1.91E+02	8.29E+03	1.20E+04			9
105	17.223	23.804	5	0.00E+00	2.57E+00	3.67E+00			1
106	17.181	24.103	5	1.19E+00	4.41E+01	6.42E+01			2
107	17.369	24.259	5	6.93E-05	6.40E-01	9.14E-01			1
108	17.177	24.439	5	2.62E+01	5.02E+02	7.43E+02			5
109	17.196	24.503	5	1.99E+02	5.94E+03	8.68E+03			8
110	17.283	23.842	5	0.00E+00	1.34E+00	1.91E+00			1
111	17.266	23.993	5	6.73E-02	4.95E+00	7.14E+00			1
112	17.244	24.171	5	6.32E-01	3.18E+01	4.61E+01			2
113	17.262	24.275	5	1.41E-01	9.43E+00	1.36E+01			1
114	17.357	23.679	5	0.00E+00	2.18E-01	3.11E-01			1
117	17.349	23.785	5	0.00E+00	6.21E-01	8.87E-01			1
119	17.263	24.484	5	4.54E-04	0.00E+00	4.54E-04			1
143	17.185	23.996	5	2.69E-01	1.52E+01	2.20E+01			1
193	17.263	23.765	5	0.00E+00	1.10E+00	1.57E+00			1
204	17.183	24.370	5	6.25E+01	5.40E+02	8.34E+02			6
206	17.314	24.187	5	0.00E+00	6.46E-02	9.23E-02			1
207	17.355	23.946	5	2.27E-06	1.29E+00	1.84E+00			1
208	17.275	23.609	5	0.00E+00	3.53E-02	5.04E-02			1
209	17.266	24.069	5	1.28E-01	8.70E+00	1.26E+01			1
210	17.248	24.378	5	8.09E-01	2.66E+01	3.88E+01			2
212	17.355	23.859	5	0.00E+00	1.05E+00	1.50E+00			1
213	17.275	23.713	5	0.00E+00	4.88E-01	6.97E-01			1
253	17.471	24.264	5	7.63E+00	1.72E+02	2.53E+02			4
254	17.479	23.766	5	0.00E+00	1.62E+00	2.31E+00			1
259	17.464	24.139	5	1.91E+00	6.49E+01	9.46E+01			2
261	17.537	24.105	5	5.95E-05	2.55E+00	3.64E+00			1
262	17.535	24.181	5	9.57E-05	1.79E+00	2.56E+00			1
274	17.554	23.728	5	0.00E+00	3.00E-01	4.29E-01			1
276	17.445	23.969	5	2.78E-01	1.25E+01	1.81E+01			1
277	17.554	23.921	5	0.00E+00	8.21E-01	1.17E+00			1
283	17.536	23.658	5	0.00E+00	1.60E-01	2.29E-01			1
284	17.455	23.844	5	0.00E+00	3.99E+00	5.70E+00			1
288	17.572	23.825	5	0.00E+00	3.40E-01	4.86E-01			1
289	17.538	23.994	5	2.98E-05	2.01E+00	2.87E+00			1

Mustard (HD) 250kg Bomb
Medium Attack
Release Height: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S
12 rounds at aimpoint (17.35, 24.45)									
3	17.181	23.524	2	3.94E-01	4.14E+00	6.31E+00	1	1	1
48	17.187	23.651	5	1.79E+00	1.60E+01	2.46E+01	1	1	1
49	17.468	24.443	5	4.43E+01	2.39E+00	4.77E+01	2	1	2
50	17.487	24.398	5	1.01E+01	2.69E+01	4.85E+01	2	1	2
52	17.293	24.340	5	2.46E+02	6.29E+01	3.36E+02	6	5	4
57	17.347	24.131	5	9.90E+02	9.86E+02	2.40E+03	6	6	7
58	17.336	24.001	5	6.15E+01	2.71E+02	4.49E+02	3	2	4
59	17.205	23.842	5	1.61E+01	1.17E+02	1.83E+02	2	1	3
60	17.421	24.329	5	1.06E+02	1.66E+02	3.43E+02	5	4	4
100	17.232	23.912	5	2.09E+01	1.53E+02	2.39E+02	2	1	3
102	17.175	24.255	5	5.89E+01	4.22E+02	6.62E+02	3	2	5
103	17.359	24.059	5	2.78E+02	4.19E+02	8.77E+02	6	6	6
105	17.223	23.804	5	8.50E+00	7.11E+01	1.10E+02	2	1	3
106	17.181	24.103	5	4.87E+02	1.12E+03	2.09E+03	6	6	7
107	17.369	24.259	5	3.61E+02	2.02E+03	3.25E+03	6	6	7

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

108	17.177	24.439	5	1.86E+00	4.62E-02	1.93E+00	1	1	1
110	17.283	23.842	5	1.43E+01	1.06E+02	1.66E+02	2	1	3
111	17.266	23.993	5	5.69E+01	2.68E+02	4.40E+02	3	2	4
112	17.244	24.171	5	1.19E+03	1.55E+03	3.40E+03	6	6	7
113	17.262	24.275	5	7.46E+02	4.77E+03	7.56E+03	6	6	8
114	17.357	23.679	5	1.85E+00	2.10E+01	3.19E+01	1	1	2
116	17.342	23.597	5	5.32E-01	1.07E+01	1.58E+01	1	1	1
117	17.349	23.785	5	5.90E+00	5.10E+01	7.88E+01	2	1	2
118	17.359	23.524	5	1.94E-01	5.03E+00	7.38E+00	1	1	1
143	17.185	23.996	5	3.19E+02	4.65E+02	9.83E+02	6	6	6
193	17.263	23.765	5	5.80E+00	4.85E+01	7.51E+01	2	1	2
195	17.552	24.359	5	2.27E+03	1.83E+04	2.84E+04	6	7	9
196	17.329	24.294	5	3.15E+02	2.09E+03	3.30E+03	6	6	7
204	17.183	24.370	5	3.66E+01	1.09E+02	1.92E+02	2	1	3
206	17.314	24.187	5	6.44E+02	4.94E+03	7.70E+03	6	6	8
207	17.355	23.946	5	2.08E+01	1.53E+02	2.39E+02	2	1	3
208	17.275	23.609	5	7.93E-01	1.23E+01	1.84E+01	1	1	1
209	17.266	24.069	5	2.32E+02	4.65E+02	8.96E+02	6	5	6
210	17.248	24.378	5	1.92E+03	1.58E+04	2.45E+04	6	7	9
211	17.359	24.366	5	1.52E+03	1.26E+04	1.95E+04	6	7	9
212	17.355	23.859	5	1.04E+01	8.88E+01	1.37E+02	2	1	3
213	17.275	23.713	5	3.16E+00	3.00E+01	4.60E+01	1	1	2
253	17.471	24.264	5	2.61E+02	1.56E+03	2.49E+03	6	6	7
254	17.479	23.766	5	6.69E+00	5.12E+01	7.98E+01	2	1	2
256	17.694	23.745	5	5.05E+00	3.66E+01	5.73E+01	2	1	2
259	17.464	24.139	5	5.89E+02	8.11E+02	1.75E+03	6	6	7
260	17.671	24.255	5	2.58E+02	1.41E+03	2.27E+03	6	6	7
261	17.537	24.105	5	4.50E+02	6.16E+02	1.33E+03	6	6	6
262	17.535	24.181	5	6.94E+02	1.17E+03	2.37E+03	6	6	7
272	17.654	24.088	5	5.54E+02	5.73E+02	1.37E+03	6	6	6
274	17.554	23.728	5	4.50E+00	3.08E+01	4.85E+01	1	1	2
275	17.659	23.893	5	1.43E+01	1.16E+02	1.80E+02	2	1	3
276	17.445	23.969	5	3.09E+01	1.81E+02	2.89E+02	2	1	4
277	17.554	23.921	5	1.65E+01	1.30E+02	2.02E+02	2	1	3
278	17.752	24.260	5	1.98E-03	0.00E+00	1.98E-03	1	1	1
280	17.642	24.022	5	1.10E+02	2.95E+02	5.31E+02	5	4	5
281	17.580	24.093	5	4.23E+02	9.20E+02	1.74E+03	6	6	7
283	17.536	23.658	5	1.95E+00	1.82E+01	2.80E+01	1	1	2
284	17.455	23.844	5	9.57E+00	7.93E+01	1.23E+02	2	1	3
286	17.668	23.823	5	1.03E+01	7.53E+01	1.18E+02	2	1	3
288	17.572	23.825	5	9.95E+00	8.12E+01	1.26E+02	2	1	3
289	17.538	23.994	5	5.56E+01	2.53E+02	4.17E+02	3	2	4

12 rounds at aimpoint (17.35, 24.35)

3	17.181	23.524	2	6.81E-02	4.03E+00	6.81E-02	1	1	
48	17.187	23.651	5	5.26E-01	1.53E+01	5.26E-01	1	1	
52	17.293	24.340	5	0.00E+00	4.26E-03	0.00E+00	1	1	
57	17.347	24.131	5	2.25E+01	1.39E+03	2.25E+01	2	1	
58	17.336	24.001	5	2.34E+00	1.94E+02	2.34E+00	1	1	
59	17.205	23.842	5	1.22E+00	1.10E+02	1.22E+00	1	1	
60	17.421	24.329	5	0.00E+00	2.73E-02	0.00E+00	1	1	
100	17.232	23.912	5	8.03E-01	1.05E+02	8.03E-01	1	1	
102	17.175	24.255	5	8.49E-02	6.11E+01	8.49E-02	1	1	
103	17.359	24.059	5	1.01E+01	3.99E+02	1.01E+01	2	1	
105	17.223	23.804	5	6.16E-01	5.56E+01	6.16E-01	1	1	
106	17.181	24.103	5	5.55E+00	1.17E+03	5.55E+00	2	1	
107	17.369	24.259	5	2.53E+00	1.65E+03	2.53E+00	1	1	
110	17.283	23.842	5	8.00E-01	8.74E+01	8.00E-01	1	1	
111	17.266	23.993	5	1.87E+00	1.80E+02	1.87E+00	1	1	
112	17.244	24.171	5	1.90E+01	2.16E+03	1.90E+01	2	1	
113	17.262	24.275	5	3.14E+00	3.28E+03	3.14E+00	1	1	
114	17.357	23.679	5	4.64E-01	1.73E+01	4.64E-01	1	1	
116	17.342	23.597	5	1.22E-01	8.12E+00	1.22E-01	1	1	
117	17.349	23.785	5	6.28E-01	3.29E+01	6.28E-01	1	1	
118	17.359	23.524	5	0.00E+00	4.55E+00	0.00E+00	1	1	
143	17.185	23.996	5	9.13E+00	4.67E+02	9.13E+00	2	1	
193	17.263	23.765	5	6.55E-01	3.45E+01	6.55E-01	1	1	
196	17.329	24.294	5	3.42E-01	4.85E+02	3.42E-01	1	1	
206	17.314	24.187	5	1.65E+00	1.89E+03	1.65E+00	1	1	

**Case 2a: Protected (Eye,
Respiratory Exposure)**

Table F5
HD Exposure Estimates
Support Brigade

207	17.355	23.946	5	1.26E+00	1.20E+02	1.26E+00	1	1	
208	17.275	23.609	5	2.22E-01	9.63E+00	2.22E-01	1	1	
209	17.266	24.069	5	6.71E+00	3.26E+02	6.71E+00	2	1	
212	17.355	23.859	5	6.74E-01	5.60E+01	6.74E-01	1	1	
213	17.275	23.713	5	5.94E-01	2.51E+01	5.94E-01	1	1	
253	17.471	24.264	5	1.47E+00	1.09E+03	1.47E+00	1	1	
254	17.479	23.766	5	6.71E-01	4.22E+01	6.71E-01	1	1	
256	17.694	23.745	5	6.76E-01	3.77E+01	6.76E-01	1	1	
257	17.825	23.345	5	0.00E+00	2.75E-02	0.00E+00	1	1	
259	17.464	24.139	5	1.16E+01	8.62E+02	1.16E+01	2	1	
260	17.671	24.255	5	1.86E+00	1.13E+03	1.86E+00	1	1	
261	17.537	24.105	5	1.12E+01	5.88E+02	1.12E+01	2	1	
262	17.535	24.181	5	9.62E+00	1.37E+03	9.62E+00	2	1	
272	17.654	24.088	5	1.71E+01	7.11E+02	1.71E+01	2	1	
274	17.554	23.728	5	5.71E-01	2.26E+01	5.71E-01	1	1	
275	17.659	23.893	5	8.39E-01	7.86E+01	8.39E-01	1	1	
276	17.445	23.969	5	1.85E+00	1.50E+02	1.85E+00	1	1	
277	17.554	23.921	5	9.45E-01	9.15E+01	9.45E-01	1	1	
280	17.642	24.022	5	5.36E+00	2.62E+02	5.36E+00	2	1	
281	17.580	24.093	5	4.97E+00	9.02E+02	4.97E+00	1	1	
283	17.536	23.658	5	4.34E-01	1.43E+01	4.34E-01	1	1	
284	17.455	23.844	5	6.68E-01	5.03E+01	6.68E-01	1	1	
286	17.668	23.823	5	5.43E-01	5.52E+01	5.43E-01	1	1	
288	17.572	23.825	5	5.49E-01	6.09E+01	5.49E-01	1	1	
289	17.538	23.994	5	2.29E+00	1.89E+02	2.29E+00	1	1	

Case 2b: Protected (Skin Exposure)

12 rounds at aimpoint (17.35, 24.35)

3	17.181	23.524	2	4.71E-01	1.15E+01	1.69E+01			1
48	17.187	23.651	5	2.62E+00	4.37E+01	6.50E+01			2
52	17.293	24.340	5	0.00E+00	1.22E-02	1.74E-02			1
57	17.347	24.131	5	2.34E+02	3.97E+03	5.91E+03			8
58	17.336	24.001	5	6.38E+01	5.55E+02	8.57E+02			6
59	17.205	23.842	5	2.98E+01	3.15E+02	4.80E+02			4
60	17.421	24.329	5	0.00E+00	7.80E-02	1.11E-01			1
100	17.232	23.912	5	1.37E+01	3.01E+02	4.44E+02			4
102	17.175	24.255	5	1.02E+00	1.75E+02	2.51E+02			4
103	17.359	24.059	5	1.42E+02	1.14E+03	1.77E+03			7
105	17.223	23.804	5	7.67E+00	1.59E+02	2.35E+02			3
106	17.181	24.103	5	6.18E+01	3.35E+03	4.85E+03			8
107	17.369	24.259	5	2.99E+01	4.72E+03	6.77E+03			8
110	17.283	23.842	5	1.68E+01	2.50E+02	3.74E+02			4
111	17.266	23.993	5	5.03E+01	5.16E+02	7.87E+02			6
112	17.244	24.171	5	1.93E+02	6.18E+03	9.02E+03			8
113	17.262	24.275	5	4.10E+01	9.39E+03	1.35E+04			9
114	17.357	23.679	5	2.47E+00	4.95E+01	7.32E+01			2
116	17.342	23.597	5	8.93E-01	2.32E+01	3.40E+01			2
117	17.349	23.785	5	4.55E+00	9.41E+01	1.39E+02			3
118	17.359	23.524	5	4.17E-01	1.30E+01	1.90E+01			1
143	17.185	23.996	5	1.13E+02	1.34E+03	2.03E+03			7
193	17.263	23.765	5	4.51E+00	9.87E+01	1.46E+02			3
196	17.329	24.294	5	4.79E+00	1.39E+03	1.99E+03			7
206	17.314	24.187	5	2.21E+01	5.40E+03	7.74E+03			8
207	17.355	23.946	5	3.26E+01	3.43E+02	5.23E+02			5
208	17.275	23.609	5	1.26E+00	2.75E+01	4.05E+01			2
209	17.266	24.069	5	9.13E+01	9.34E+02	1.43E+03			6
212	17.355	23.859	5	7.35E+00	1.60E+02	2.36E+02			3
213	17.275	23.713	5	4.28E+00	7.19E+01	1.07E+02			3
253	17.471	24.264	5	1.79E+01	3.12E+03	4.48E+03			8
254	17.479	23.766	5	5.47E+00	1.21E+02	1.78E+02			3
256	17.694	23.745	5	5.66E+00	1.08E+02	1.60E+02			3
257	17.825	23.345	5	0.00E+00	7.85E-02	1.12E-01			1
259	17.464	24.139	5	1.19E+02	2.47E+03	3.65E+03			7
260	17.671	24.255	5	2.19E+01	3.23E+03	4.64E+03			8
261	17.537	24.105	5	1.30E+02	1.68E+03	2.53E+03			7
262	17.535	24.181	5	9.99E+01	3.92E+03	5.70E+03			8
272	17.654	24.088	5	2.12E+02	2.03E+03	3.11E+03			7
274	17.554	23.728	5	3.67E+00	6.46E+01	9.60E+01			2
275	17.659	23.893	5	1.01E+01	2.25E+02	3.32E+02			4
276	17.445	23.969	5	5.71E+01	4.30E+02	6.71E+02			5

Table F5
HD Exposure Estimates
Support Brigade

277	17.554	23.921	5	1.61E+01	2.62E+02	3.90E+02			4
280	17.642	24.022	5	1.13E+02	7.50E+02	1.18E+03			6
281	17.580	24.093	5	5.59E+01	2.58E+03	3.74E+03			7
283	17.536	23.658	5	2.20E+00	4.09E+01	6.06E+01			2
284	17.455	23.844	5	6.46E+00	1.44E+02	2.12E+02			3
286	17.668	23.823	5	6.88E+00	1.58E+02	2.33E+02			3
288	17.572	23.825	5	7.53E+00	1.74E+02	2.56E+02			4
289	17.538	23.994	5	6.55E+01	5.41E+02	8.38E+02			6

Mustard (HD) 250kg Bomb
Heavy Attack
Release Height: 70m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (17.35, 24.55)									
3	17.181	23.524	2	1.84E+00	4.31E+00	8.00E+00	1	1	1
48	17.187	23.651	5	5.81E+00	1.74E+01	3.07E+01	2	1	2
49	17.468	24.443	5	5.48E+02	2.13E+03	3.59E+03	6	6	7
50	17.487	24.398	5	1.06E+03	6.20E+03	9.92E+03	6	6	8
52	17.293	24.340	5	1.38E+03	4.96E+03	8.47E+03	6	7	8
56	17.274	24.597	5	5.90E+01	3.07E+02	4.98E+02	3	2	4
57	17.347	24.131	5	1.23E+03	1.14E+03	2.86E+03	6	7	7
58	17.336	24.001	5	3.03E+02	3.44E+02	7.94E+02	6	6	6
59	17.205	23.842	5	3.82E+01	1.32E+02	2.27E+02	2	1	3
60	17.421	24.329	5	4.93E+02	1.75E+03	2.99E+03	6	6	7
100	17.232	23.912	5	1.03E+02	1.86E+02	3.69E+02	5	4	4
101	17.439	24.597	5	6.83E+02	3.63E+03	5.87E+03	6	6	8
102	17.175	24.255	5	2.86E+02	9.29E+02	1.61E+03	6	6	7
103	17.359	24.059	5	6.31E+02	5.17E+02	1.37E+03	6	6	6
104	17.452	24.521	5	2.21E+03	1.46E+04	2.31E+04	6	7	9
105	17.223	23.804	5	1.75E+01	8.01E+01	1.32E+02	2	1	3
106	17.181	24.103	5	7.38E+02	1.32E+03	2.62E+03	6	6	7
107	17.369	24.259	5	7.11E+02	2.47E+03	4.24E+03	6	6	8
108	17.177	24.439	5	2.80E+02	1.92E+03	3.02E+03	6	6	7
109	17.196	24.503	5	8.93E+02	4.40E+03	7.18E+03	6	6	8
110	17.283	23.842	5	2.98E+01	1.21E+02	2.03E+02	2	1	3
111	17.266	23.993	5	2.65E+02	3.37E+02	7.46E+02	6	6	5
112	17.244	24.171	5	1.45E+03	1.79E+03	4.01E+03	6	7	8
113	17.262	24.275	5	1.38E+03	5.41E+03	9.11E+03	6	7	8
114	17.357	23.679	5	5.68E+00	2.46E+01	4.08E+01	2	1	2
115	17.323	24.549	5	4.77E+01	1.84E+02	3.11E+02	2	1	4
116	17.342	23.597	5	3.41E+00	1.16E+01	2.00E+01	1	1	1
117	17.349	23.785	5	1.10E+01	5.77E+01	9.34E+01	2	1	2
118	17.359	23.524	5	1.30E+00	5.44E+00	9.07E+00	1	1	1
119	17.263	24.484	5	9.55E+02	5.21E+03	8.40E+03	6	6	8
143	17.185	23.996	5	5.35E+02	5.36E+02	1.30E+03	6	6	6
193	17.263	23.765	5	1.12E+01	5.25E+01	8.62E+01	2	1	2
195	17.552	24.359	5	3.78E+03	1.80E+04	2.95E+04	6	7	9
196	17.329	24.294	5	6.42E+02	2.63E+03	4.40E+03	6	6	8
197	17.350	24.467	5	1.75E+03	8.32E+03	1.36E+04	6	7	9
204	17.183	24.370	5	6.62E+02	3.23E+03	5.28E+03	6	6	8
206	17.314	24.187	5	1.26E+03	5.47E+03	9.07E+03	6	7	8
207	17.355	23.946	5	9.77E+01	1.94E+02	3.75E+02	4	3	4
208	17.275	23.609	5	4.13E+00	1.34E+01	2.33E+01	1	1	1
209	17.266	24.069	5	4.96E+02	5.90E+02	1.34E+03	6	6	6
210	17.248	24.378	5	3.31E+03	1.32E+04	2.22E+04	6	7	9
211	17.359	24.366	5	2.55E+03	1.15E+04	1.90E+04	6	7	9
212	17.355	23.859	5	2.37E+01	1.05E+02	1.74E+02	2	1	3
213	17.275	23.713	5	8.31E+00	3.44E+01	5.75E+01	2	1	2
253	17.471	24.264	5	5.77E+02	2.04E+03	3.49E+03	6	6	7
254	17.479	23.766	5	1.33E+01	5.72E+01	9.50E+01	2	1	2
256	17.694	23.745	5	1.15E+01	4.23E+01	7.19E+01	2	1	2
259	17.464	24.139	5	7.98E+02	1.00E+03	2.23E+03	6	6	7
260	17.671	24.255	5	5.55E+02	1.86E+03	3.21E+03	6	6	7
261	17.537	24.105	5	6.69E+02	7.63E+02	1.76E+03	6	6	7

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

262	17.535	24.181	5	9.48E+02	1.47E+03	3.05E+03	6	6	7
272	17.654	24.088	5	8.72E+02	6.87E+02	1.85E+03	6	6	7
274	17.554	23.728	5	8.81E+00	3.66E+01	6.11E+01	2	1	2
275	17.659	23.893	5	5.43E+01	1.35E+02	2.47E+02	3	2	3
276	17.445	23.969	5	1.99E+02	2.33E+02	5.32E+02	6	5	5
277	17.554	23.921	5	6.86E+01	1.58E+02	2.94E+02	3	2	4
278	17.752	24.260	5	7.01E-02	1.88E+00	2.76E+00	1	1	1
280	17.642	24.022	5	4.77E+02	3.73E+02	1.01E+03	6	6	6
281	17.580	24.093	5	6.53E+02	1.10E+03	2.22E+03	6	6	7
283	17.536	23.658	5	5.39E+00	2.05E+01	3.47E+01	2	1	2
284	17.455	23.844	5	1.85E+01	9.39E+01	1.53E+02	2	1	3
286	17.668	23.823	5	1.86E+01	8.72E+01	1.43E+02	2	1	3
288	17.572	23.825	5	2.06E+01	9.53E+01	1.57E+02	2	1	3
289	17.538	23.994	5	2.96E+02	3.14E+02	7.45E+02	6	6	5

24 rounds at aimpoint (17.35, 24.65)

3	17.181	23.524	2	9.73E-01	4.39E+00	9.73E-01	1	1	
48	17.187	23.651	5	1.86E+00	1.54E+01	1.86E+00	1	1	
49	17.468	24.443	5	3.96E+00	1.86E+03	3.96E+00	1	1	
50	17.487	24.398	5	6.95E-01	1.02E+03	6.95E-01	1	1	
52	17.293	24.340	5	1.06E+01	4.62E+03	1.06E+01	2	1	
57	17.347	24.131	5	2.37E+01	1.51E+03	2.37E+01	2	1	
58	17.336	24.001	5	3.73E+00	2.45E+02	3.73E+00	1	1	
59	17.205	23.842	5	2.72E+00	1.24E+02	2.72E+00	1	1	
60	17.421	24.329	5	3.02E+00	1.05E+03	3.02E+00	1	1	
100	17.232	23.912	5	2.08E+00	1.35E+02	2.08E+00	1	1	
102	17.175	24.255	5	8.97E-01	2.33E+02	8.97E-01	1	1	
103	17.359	24.059	5	1.15E+01	4.66E+02	1.15E+01	2	1	
104	17.452	24.521	5	4.64E-01	9.84E+02	4.64E-01	1	1	
105	17.223	23.804	5	2.26E+00	6.48E+01	2.26E+00	1	1	
106	17.181	24.103	5	7.11E+00	1.31E+03	7.11E+00	2	1	
107	17.369	24.259	5	6.75E+00	1.73E+03	6.75E+00	2	1	
108	17.177	24.439	5	7.50E-02	9.45E+01	7.50E-02	1	1	
109	17.196	24.503	5	4.63E-05	2.14E+00	4.63E-05	1	1	
110	17.283	23.842	5	2.27E+00	1.02E+02	2.27E+00	1	1	
111	17.266	23.993	5	3.12E+00	2.30E+02	3.12E+00	1	1	
112	17.244	24.171	5	2.06E+01	2.37E+03	2.06E+01	2	1	
113	17.262	24.275	5	1.33E+01	2.72E+03	1.33E+01	2	1	
114	17.357	23.679	5	1.63E+00	1.91E+01	1.63E+00	1	1	
115	17.323	24.549	5	5.68E-06	2.63E-01	5.68E-06	1	1	
116	17.342	23.597	5	1.11E+00	9.42E+00	1.11E+00	1	1	
117	17.349	23.785	5	2.04E+00	3.91E+01	2.04E+00	1	1	
118	17.359	23.524	5	8.02E-01	5.06E+00	8.02E-01	1	1	
119	17.263	24.484	5	2.26E+00	1.67E+03	2.26E+00	1	1	
143	17.185	23.996	5	9.99E+00	5.27E+02	9.99E+00	2	1	
193	17.263	23.765	5	2.15E+00	4.04E+01	2.15E+00	1	1	
195	17.552	24.359	5	2.40E+01	2.26E+03	2.40E+01	2	1	
196	17.329	24.294	5	4.42E+00	6.85E+02	4.42E+00	1	1	
197	17.350	24.467	5	8.75E+00	5.18E+03	8.75E+00	2	1	
204	17.183	24.370	5	2.73E+00	1.64E+03	2.73E+00	1	1	
206	17.314	24.187	5	1.13E+01	1.90E+03	1.13E+01	2	1	
207	17.355	23.946	5	2.48E+00	1.45E+02	2.48E+00	1	1	
208	17.275	23.609	5	1.49E+00	1.10E+01	1.49E+00	1	1	
209	17.266	24.069	5	7.93E+00	4.22E+02	7.93E+00	2	1	
210	17.248	24.378	5	2.25E+01	3.00E+03	2.25E+01	2	1	
211	17.359	24.366	5	1.65E+01	1.79E+03	1.65E+01	2	1	
212	17.355	23.859	5	2.08E+00	7.18E+01	2.08E+00	1	1	
213	17.275	23.713	5	2.09E+00	2.91E+01	2.09E+00	1	1	
253	17.471	24.264	5	4.71E+00	1.15E+03	4.71E+00	1	1	
254	17.479	23.766	5	2.32E+00	4.87E+01	2.32E+00	1	1	
256	17.694	23.745	5	2.14E+00	4.21E+01	2.14E+00	1	1	
257	17.825	23.345	5	0.00E+00	3.09E-02	0.00E+00	1	1	
259	17.464	24.139	5	1.28E+01	9.85E+02	1.28E+01	2	1	
260	17.671	24.255	5	4.80E+00	1.29E+03	4.80E+00	1	1	
261	17.537	24.105	5	1.28E+01	6.90E+02	1.28E+01	2	1	
262	17.535	24.181	5	1.11E+01	1.57E+03	1.11E+01	2	1	
272	17.654	24.088	5	1.93E+01	7.99E+02	1.93E+01	2	1	
274	17.554	23.728	5	1.91E+00	2.75E+01	1.91E+00	1	1	
275	17.659	23.893	5	2.10E+00	9.69E+01	2.10E+00	1	1	

Case 2a: Protected (Eye,
Respiratory Exposure)

Table F5
HD Exposure Estimates
Support Brigade

276	17.445	23.969	5	3.53E+00	1.89E+02	3.53E+00	1	1	
277	17.554	23.921	5	2.25E+00	1.16E+02	2.25E+00	1	1	
278	17.752	24.260	5	6.73E-05	0.00E+00	6.73E-05	1	1	
280	17.642	24.022	5	7.59E+00	3.22E+02	7.59E+00	2	1	
281	17.580	24.093	5	6.17E+00	1.04E+03	6.17E+00	2	1	
283	17.536	23.658	5	1.72E+00	1.63E+01	1.72E+00	1	1	
284	17.455	23.844	5	2.12E+00	6.35E+01	2.12E+00	1	1	
286	17.668	23.823	5	2.08E+00	6.55E+01	2.08E+00	1	1	
288	17.572	23.825	5	2.20E+00	7.25E+01	2.20E+00	1	1	
289	17.538	23.994	5	3.89E+00	2.33E+02	3.89E+00	1	1	

24 rounds at aimpoint (17.35, 24.65)

Case 2b: Protected (Skin Exposure)

3	17.181	23.524	2	3.02E+00	1.26E+01	2.10E+01			1
48	17.187	23.651	5	6.95E+00	4.41E+01	7.00E+01			2
49	17.468	24.443	5	4.58E+01	5.33E+03	7.66E+03			8
50	17.487	24.398	5	1.05E+01	2.91E+03	4.17E+03			8
52	17.293	24.340	5	1.23E+02	1.32E+04	1.90E+04			9
57	17.347	24.131	5	2.94E+02	4.32E+03	6.47E+03			8
58	17.336	24.001	5	8.42E+01	7.00E+02	1.08E+03			6
59	17.205	23.842	5	5.91E+01	3.55E+02	5.66E+02			5
60	17.421	24.329	5	3.64E+01	3.00E+03	4.32E+03			8
100	17.232	23.912	5	3.17E+01	3.85E+02	5.82E+02			5
102	17.175	24.255	5	1.68E+01	6.68E+02	9.71E+02			6
103	17.359	24.059	5	1.67E+02	1.33E+03	2.07E+03			7
104	17.452	24.521	5	8.02E+00	2.82E+03	4.04E+03			8
105	17.223	23.804	5	1.55E+01	1.85E+02	2.80E+02			4
106	17.181	24.103	5	1.10E+02	3.75E+03	5.47E+03			8
107	17.369	24.259	5	9.05E+01	4.95E+03	7.16E+03			8
108	17.177	24.439	5	1.27E+00	2.70E+02	3.87E+02			4
109	17.196	24.503	5	8.02E-04	6.12E+00	8.74E+00			1
110	17.283	23.842	5	3.65E+01	2.93E+02	4.55E+02			4
111	17.266	23.993	5	6.98E+01	6.58E+02	1.01E+03			6
112	17.244	24.171	5	2.74E+02	6.76E+03	9.93E+03			8
113	17.262	24.275	5	1.67E+02	7.79E+03	1.13E+04			8
114	17.357	23.679	5	6.38E+00	5.45E+01	8.42E+01			2
115	17.323	24.549	5	9.84E-05	7.52E-01	1.07E+00			1
116	17.342	23.597	5	3.99E+00	2.70E+01	4.26E+01			2
117	17.349	23.785	5	1.02E+01	1.12E+02	1.70E+02			3
118	17.359	23.524	5	2.71E+00	1.45E+01	2.34E+01			1
119	17.263	24.484	5	2.75E+01	4.78E+03	6.86E+03			8
143	17.185	23.996	5	1.35E+02	1.51E+03	2.29E+03			7
193	17.263	23.765	5	1.03E+01	1.16E+02	1.76E+02			3
195	17.552	24.359	5	2.72E+02	6.45E+03	9.49E+03			8
196	17.329	24.294	5	5.49E+01	1.96E+03	2.85E+03			7
197	17.350	24.467	5	1.02E+02	1.48E+04	2.12E+04			9
204	17.183	24.370	5	3.22E+01	4.68E+03	6.72E+03			8
206	17.314	24.187	5	1.43E+02	5.42E+03	7.89E+03			8
207	17.355	23.946	5	6.26E+01	4.15E+02	6.55E+02			5
208	17.275	23.609	5	5.14E+00	3.15E+01	5.01E+01			2
209	17.266	24.069	5	1.13E+02	1.21E+03	1.84E+03			7
210	17.248	24.378	5	2.55E+02	8.58E+03	1.25E+04			9
211	17.359	24.366	5	1.86E+02	5.12E+03	7.50E+03			8
212	17.355	23.859	5	1.76E+01	2.05E+02	3.10E+02			4
213	17.275	23.713	5	9.05E+00	8.32E+01	1.28E+02			3
253	17.471	24.264	5	6.40E+01	3.29E+03	4.76E+03			8
254	17.479	23.766	5	1.31E+01	1.39E+02	2.12E+02			3
256	17.694	23.745	5	1.16E+01	1.21E+02	1.84E+02			3
257	17.825	23.345	5	0.00E+00	8.84E-02	1.26E-01			1
259	17.464	24.139	5	1.64E+02	2.82E+03	4.19E+03			8
260	17.671	24.255	5	6.69E+01	3.70E+03	5.35E+03			8
261	17.537	24.105	5	1.63E+02	1.97E+03	2.98E+03			7
262	17.535	24.181	5	1.58E+02	4.50E+03	6.59E+03			8
272	17.654	24.088	5	2.46E+02	2.29E+03	3.52E+03			7
274	17.554	23.728	5	8.19E+00	7.86E+01	1.20E+02			3
275	17.659	23.893	5	2.78E+01	2.77E+02	4.24E+02			4
276	17.445	23.969	5	8.90E+01	5.40E+02	8.60E+02			6
277	17.554	23.921	5	4.60E+01	3.33E+02	5.22E+02			5
278	17.752	24.260	5	1.17E-03	0.00E+00	1.17E-03			1
280	17.642	24.022	5	1.38E+02	9.22E+02	1.46E+03			6

Table F5
HD Exposure Estimates
Support Brigade

281	17.580	24.093	5	9.62E+01	2.98E+03	4.35E+03			8
283	17.536	23.658	5	6.59E+00	4.65E+01	7.30E+01			2
284	17.455	23.844	5	1.50E+01	1.82E+02	2.75E+02			4
286	17.668	23.823	5	1.60E+01	1.87E+02	2.83E+02			4
288	17.572	23.825	5	1.73E+01	2.07E+02	3.13E+02			4
289	17.538	23.994	5	8.92E+01	6.66E+02	1.04E+03			6

Mustard (HD) 250kg TBM
Light Attack
Release Height: 500m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category E R S		
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Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

1 round at aimpoint (17.30, 24.55)									
48	17.187	23.651	5	1.85E-02	2.73E-01	4.09E-01	1	1	1
52	17.293	24.340	5	1.13E+03	2.50E+03	4.70E+03	6	6	8
57	17.347	24.131	5	1.84E+02	4.58E+02	8.38E+02	6	5	6
58	17.336	24.001	5	7.07E+01	2.05E+02	3.64E+02	4	3	4
59	17.205	23.842	5	7.59E+00	1.58E+01	3.02E+01	2	1	2
60	17.421	24.329	5	8.63E-05	5.20E-02	7.44E-02	1	1	1
100	17.232	23.912	5	2.14E+01	5.74E+01	1.03E+02	2	1	3
102	17.175	24.255	5	1.35E-03	1.36E+00	1.94E+00	1	1	1
103	17.359	24.059	5	8.54E+01	2.41E+02	4.30E+02	4	3	4
105	17.223	23.804	5	5.95E+00	1.07E+01	2.12E+01	2	1	1
106	17.181	24.103	5	1.41E+01	4.29E+01	7.54E+01	2	1	2
107	17.369	24.259	5	6.03E+01	1.20E+02	2.32E+02	3	2	3
108	17.177	24.439	5	1.35E-02	0.00E+00	1.35E-02	1	1	1
109	17.196	24.503	5	1.25E-02	0.00E+00	1.25E-02	1	1	1
110	17.283	23.842	5	1.34E+01	3.13E+01	5.81E+01	2	1	2
111	17.266	23.993	5	6.57E+01	1.93E+02	3.41E+02	3	2	4
112	17.244	24.171	5	1.97E+02	3.83E+02	7.44E+02	6	5	5
113	17.262	24.275	5	4.05E+02	7.22E+02	1.44E+03	6	6	6
114	17.357	23.679	5	1.12E+00	9.75E-01	2.51E+00	1	1	1
115	17.323	24.549	5	8.65E-03	4.28E-02	6.98E-02	1	1	1
116	17.342	23.597	5	0.00E+00	1.15E-01	1.64E-01	1	1	1
117	17.349	23.785	5	5.74E+00	1.01E+01	2.02E+01	2	1	1
119	17.263	24.484	5	5.43E+00	2.39E+00	8.84E+00	2	1	1
143	17.185	23.996	5	1.61E+01	4.88E+01	8.58E+01	2	1	2
193	17.263	23.765	5	4.50E+00	7.20E+00	1.48E+01	1	1	1
196	17.329	24.294	5	5.59E+02	1.03E+03	2.03E+03	6	6	7
197	17.350	24.467	5	3.21E-01	0.00E+00	3.21E-01	1	1	1
204	17.183	24.370	5	9.92E-02	0.00E+00	9.92E-02	1	1	1
206	17.314	24.187	5	5.73E+02	1.14E+03	2.20E+03	6	6	7
207	17.355	23.946	5	3.52E+01	9.92E+01	1.77E+02	2	1	3
208	17.275	23.609	5	1.14E-04	1.94E-01	2.77E-01	1	1	1
209	17.266	24.069	5	1.36E+02	3.73E+02	6.69E+02	5	4	5
210	17.248	24.378	5	1.55E+01	1.25E+01	3.34E+01	2	1	2
211	17.359	24.366	5	2.21E+01	1.79E+01	4.77E+01	2	1	2
212	17.355	23.859	5	1.39E+01	3.34E+01	6.16E+01	2	1	2
213	17.275	23.713	5	2.19E+00	2.56E+00	5.85E+00	1	1	1
254	17.479	23.766	5	8.04E-01	1.01E+00	2.25E+00	1	1	1
259	17.464	24.139	5	1.27E+00	4.23E+00	7.31E+00	1	1	1
261	17.537	24.105	5	0.00E+00	6.99E-02	9.99E-02	1	1	1
276	17.445	23.969	5	6.98E+00	2.04E+01	3.61E+01	2	1	2
277	17.554	23.921	5	0.00E+00	4.24E-01	6.06E-01	1	1	1
284	17.455	23.844	5	2.89E+00	5.57E+00	1.08E+01	1	1	1
288	17.572	23.825	5	0.00E+00	3.25E-02	4.64E-02	1	1	1
289	17.538	23.994	5	1.53E-04	8.08E-01	1.15E+00	1	1	1

Case 2a: Protected (Eye,
Respiratory Exposure)

1 round at aimpoint (17.35, 24.20)									
58	17.336	24.001	5	0.00E+00	7.38E-02	0.00E+00	1	1	
103	17.359	24.059	5	0.00E+00	3.94E+01	0.00E+00	1	1	

Case 2b: Protected (Skin
Exposure)

1 round at aimpoint (17.35, 24.20)									
57	17.347	24.131	5	1.29E-01	4.37E+02	6.24E+02			5
58	17.336	24.001	5	1.36E+00	1.59E+03	2.27E+03			7
103	17.359	24.059	5	9.98E-01	1.43E+03	2.04E+03			7
110	17.283	23.842	5	0.00E+00	1.03E+01	1.47E+01			1

Table F5
HD Exposure Estimates
Support Brigade

111	17.266	23.993	5	0.00E+00	4.68E-01	6.69E-01			1
117	17.349	23.785	5	0.00E+00	5.36E+00	7.66E+00			1
207	17.355	23.946	5	1.25E+00	1.80E+03	2.57E+03			7
212	17.355	23.859	5	2.33E-05	3.69E+02	5.27E+02			5
276	17.445	23.969	5	0.00E+00	3.51E-01	5.01E-01			1

Mustard (HD) 500kg TBM
Medium Attack
Release Height: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (17.65, 24.75)									
3	17.181	23.524	2	2.85E-01	1.83E-01	5.46E-01	1	1	1
48	17.187	23.651	5	1.69E+00	1.81E+00	4.28E+00	1	1	1
49	17.468	24.443	5	1.70E+01	4.14E+01	7.61E+01	2	1	2
50	17.487	24.398	5	1.75E+01	3.70E+01	7.04E+01	2	1	2
52	17.293	24.340	5	2.50E+02	6.11E+02	1.12E+03	6	6	6
53	17.202	24.669	5	3.84E-02	0.00E+00	3.84E-02	1	1	1
54	17.418	24.675	5	4.55E+00	5.54E+00	1.25E+01	1	1	1
55	17.339	24.697	5	1.35E+02	5.55E+02	9.28E+02	5	4	6
56	17.274	24.597	5	2.21E+01	1.38E+01	4.18E+01	2	1	2
57	17.347	24.131	5	2.25E+02	5.47E+02	1.01E+03	6	5	6
58	17.336	24.001	5	9.37E+01	2.39E+02	4.35E+02	4	3	4
59	17.205	23.842	5	1.03E+01	2.26E+01	4.26E+01	2	1	2
60	17.421	24.329	5	2.94E+02	6.29E+02	1.19E+03	6	6	6
100	17.232	23.912	5	2.18E+01	5.72E+01	1.04E+02	2	1	3
101	17.439	24.597	5	1.74E+01	2.68E+01	5.57E+01	2	1	2
102	17.175	24.255	5	6.10E+00	1.87E+01	3.28E+01	2	1	2
103	17.359	24.059	5	1.47E+02	3.58E+02	6.58E+02	5	4	5
104	17.452	24.521	5	9.17E+00	1.02E+01	2.37E+01	2	1	1
105	17.223	23.804	5	9.56E+00	1.98E+01	3.78E+01	2	1	2
106	17.181	24.103	5	1.50E+01	4.45E+01	7.86E+01	2	1	2
107	17.369	24.259	5	4.36E+02	9.53E+02	1.80E+03	6	6	7
108	17.177	24.439	5	1.15E-01	5.04E-01	8.35E-01	1	1	1
109	17.196	24.503	5	8.57E-03	0.00E+00	8.57E-03	1	1	1
110	17.283	23.842	5	2.16E+01	5.06E+01	9.39E+01	2	1	2
111	17.266	23.993	5	5.27E+01	1.41E+02	2.54E+02	3	2	4
112	17.244	24.171	5	6.86E+01	1.80E+02	3.26E+02	3	2	4
113	17.262	24.275	5	1.07E+02	2.85E+02	5.14E+02	5	4	5
114	17.357	23.679	5	6.37E+00	8.36E+00	1.83E+01	2	1	1
115	17.323	24.549	5	5.44E+02	1.19E+03	2.24E+03	6	6	7
116	17.342	23.597	5	2.80E+00	2.05E+00	5.73E+00	1	1	1
117	17.349	23.785	5	1.74E+01	3.54E+01	6.80E+01	2	1	2
118	17.359	23.524	5	9.60E-01	5.57E-01	1.76E+00	1	1	1
119	17.263	24.484	5	6.71E+01	9.55E+01	2.04E+02	3	2	3
143	17.185	23.996	5	1.56E+01	4.22E+01	7.59E+01	2	1	2
193	17.263	23.765	5	9.98E+00	1.89E+01	3.70E+01	2	1	2
195	17.552	24.359	5	2.02E-03	8.11E-01	1.16E+00	1	1	1
196	17.329	24.294	5	4.33E+02	1.01E+03	1.88E+03	6	6	7
197	17.350	24.467	5	1.15E+03	2.26E+03	4.38E+03	6	6	8
204	17.183	24.370	5	1.40E+00	4.51E+00	7.84E+00	1	1	1
206	17.314	24.187	5	2.38E+02	5.71E+02	1.05E+03	6	5	6
207	17.355	23.946	5	6.75E+01	1.67E+02	3.06E+02	3	2	4
208	17.275	23.609	5	2.71E+00	2.08E+00	5.68E+00	1	1	1
209	17.266	24.069	5	8.12E+01	2.06E+02	3.75E+02	4	3	4
210	17.248	24.378	5	3.11E+01	7.78E+01	1.42E+02	2	1	3
211	17.359	24.366	5	7.00E+02	1.53E+03	2.89E+03	6	6	7
212	17.355	23.859	5	3.24E+01	7.84E+01	1.44E+02	2	1	3
213	17.275	23.713	5	7.13E+00	1.05E+01	2.21E+01	2	1	1
253	17.471	24.264	5	7.46E+01	1.77E+02	3.27E+02	4	3	4
254	17.479	23.766	5	8.00E+00	1.50E+01	2.94E+01	2	1	2
256	17.694	23.745	5	8.49E-02	1.37E+00	2.04E+00	1	1	1
257	17.825	23.345	5	3.99E+00	5.69E+00	1.21E+01	1	1	1
258	17.872	23.363	5	7.23E+00	1.18E+01	2.41E+01	2	1	1
259	17.464	24.139	5	7.47E+01	1.99E+02	3.59E+02	4	3	4

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

261	17.537	24.105	5	1.42E+01	3.90E+01	6.99E+01	2	1	2
262	17.535	24.181	5	1.14E+01	3.42E+01	6.03E+01	2	1	2
264	17.946	23.354	5	9.26E+00	1.55E+01	3.14E+01	2	1	2
266	17.871	23.446	5	1.40E+01	3.01E+01	5.70E+01	2	1	2
272	17.654	24.088	5	5.90E-04	9.56E-01	1.37E+00	1	1	1
274	17.554	23.728	5	2.35E+00	3.56E+00	7.44E+00	1	1	1
275	17.659	23.893	5	6.72E-01	1.47E+00	2.77E+00	1	1	1
276	17.445	23.969	5	4.65E+01	1.25E+02	2.25E+02	2	1	3
277	17.554	23.921	5	7.22E+00	1.84E+01	3.35E+01	2	1	2
278	17.752	24.260	5	5.16E-08	0.00E+00	5.16E-08	1	1	1
280	17.642	24.022	5	3.95E-01	2.52E+00	4.00E+00	1	1	1
281	17.580	24.093	5	4.48E+00	1.30E+01	2.31E+01	1	1	1
283	17.536	23.658	5	1.40E+00	1.80E+00	3.97E+00	1	1	1
284	17.455	23.844	5	1.91E+01	4.30E+01	8.05E+01	2	1	2
286	17.668	23.823	5	6.82E-04	9.72E-01	1.39E+00	1	1	1
287	17.953	23.437	5	2.07E+01	4.53E+01	8.54E+01	2	1	2
288	17.572	23.825	5	3.55E+00	7.48E+00	1.42E+01	1	1	1
289	17.538	23.994	5	1.23E+01	3.48E+01	6.20E+01	2	1	2

2 rounds at aimpoint (12.10, 22.60)

0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
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2 rounds at aimpoint (12.10, 22.60)

296	12.417	22.105	5	7.10E-03	3.07E+02	4.39E+02			4
371	11.800	22.452	5	1.02E+00	1.59E+03	2.27E+03			7
373	11.734	22.345	5	0.00E+00	4.65E+00	6.64E+00			1
444	11.829	22.324	5	0.00E+00	1.04E+02	1.49E+02			3

Mustard (HD) 500kg TBM
Heavy Attack
Release Height: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category		
							E	R	S

4 rounds at aimpoint (17.15, 25.20)

3	17.181	23.524	2	1.04E+01	1.79E+01	3.60E+01	2	1	2
48	17.187	23.651	5	3.04E+01	7.28E+01	1.34E+02	2	1	3
49	17.468	24.443	5	1.03E+03	1.80E+03	3.60E+03	6	6	7
50	17.487	24.398	5	8.04E+02	1.51E+03	2.96E+03	6	6	7
52	17.293	24.340	5	3.81E+02	7.76E+02	1.49E+03	6	6	6
53	17.202	24.669	5	2.88E-02	0.00E+00	2.88E-02	1	1	1
54	17.418	24.675	5	4.86E+02	1.46E+03	2.57E+03	6	6	7
55	17.339	24.697	5	3.36E+01	4.59E+01	9.92E+01	2	1	2
56	17.274	24.597	5	3.29E+00	4.06E+00	9.09E+00	1	1	1
57	17.347	24.131	5	2.79E+02	6.26E+02	1.17E+03	6	6	6
58	17.336	24.001	5	2.48E+02	5.48E+02	1.03E+03	6	5	6
59	17.205	23.842	5	1.41E+02	3.22E+02	6.01E+02	5	4	5
60	17.421	24.329	5	7.78E+02	1.48E+03	2.89E+03	6	6	7
100	17.232	23.912	5	2.30E+02	5.47E+02	1.01E+03	6	5	6
101	17.439	24.597	5	7.58E+02	1.60E+03	3.04E+03	6	6	7
102	17.175	24.255	5	1.60E+02	2.26E+02	4.83E+02	6	5	4
103	17.359	24.059	5	2.11E+02	5.09E+02	9.38E+02	6	5	6
104	17.452	24.521	5	9.96E+02	1.85E+03	3.64E+03	6	6	7
105	17.223	23.804	5	1.22E+02	2.80E+02	5.22E+02	5	4	5
106	17.181	24.103	5	2.32E+02	5.37E+02	9.99E+02	6	5	6
107	17.369	24.259	5	4.21E+02	8.81E+02	1.68E+03	6	6	7
108	17.177	24.439	5	1.37E+01	2.99E+00	1.80E+01	2	1	1
109	17.196	24.503	5	6.16E+00	1.12E-01	6.32E+00	2	1	1
110	17.283	23.842	5	1.69E+02	3.69E+02	6.96E+02	6	5	5
111	17.266	23.993	5	4.07E+02	8.73E+02	1.65E+03	6	6	7
112	17.244	24.171	5	8.81E+02	1.79E+03	3.44E+03	6	6	7
113	17.262	24.275	5	1.04E+03	2.11E+03	4.05E+03	6	6	8
114	17.357	23.679	5	3.29E+01	7.33E+01	1.38E+02	2	1	3
115	17.323	24.549	5	2.10E+02	3.75E+02	7.46E+02	6	5	5
116	17.342	23.597	5	1.95E+01	3.77E+01	7.34E+01	2	1	2
117	17.349	23.785	5	7.30E+01	1.66E+02	3.10E+02	4	3	4
118	17.359	23.524	5	9.36E+00	1.45E+01	3.01E+01	2	1	2
119	17.263	24.484	5	1.34E+02	5.51E+02	9.21E+02	5	4	6

Case 2a: Protected (Eye, Respiratory Exposure)
Case 2b: Protected (Skin Exposure)

Case 1: Unprotected (Eye, Respiratory, Skin Exposure)

Table F5
HD Exposure Estimates
Support Brigade

143	17.185	23.996	5	1.96E+02	4.91E+02	8.97E+02	6	5	6
193	17.263	23.765	5	1.01E+02	2.34E+02	4.35E+02	5	4	4
195	17.552	24.359	5	2.28E+02	4.79E+02	9.12E+02	6	5	6
196	17.329	24.294	5	4.04E+02	7.66E+02	1.50E+03	6	6	6
197	17.350	24.467	5	5.74E+02	1.01E+03	2.02E+03	6	6	7
204	17.183	24.370	5	4.72E+01	3.57E+01	9.82E+01	2	1	2
206	17.314	24.187	5	5.06E+02	9.87E+02	1.92E+03	6	6	7
207	17.355	23.946	5	1.67E+02	3.58E+02	6.78E+02	6	5	5
208	17.275	23.609	5	2.77E+01	5.88E+01	1.12E+02	2	1	3
209	17.266	24.069	5	5.60E+02	1.23E+03	2.32E+03	6	6	7
210	17.248	24.378	5	6.97E+02	2.16E+03	3.78E+03	6	6	7
211	17.359	24.366	5	5.76E+02	1.09E+03	2.13E+03	6	6	7
212	17.355	23.859	5	1.10E+02	2.38E+02	4.50E+02	5	4	4
213	17.275	23.713	5	6.36E+01	1.54E+02	2.84E+02	3	2	4
253	17.471	24.264	5	4.99E+02	1.07E+03	2.03E+03	6	6	7
254	17.479	23.766	5	1.88E+01	3.13E+01	6.35E+01	2	1	2
256	17.694	23.745	5	1.18E+00	1.40E+00	3.18E+00	1	1	1
259	17.464	24.139	5	2.68E+02	6.14E+02	1.15E+03	6	6	6
260	17.671	24.255	5	7.38E+00	2.27E+01	3.98E+01	2	1	2
261	17.537	24.105	5	1.23E+02	3.09E+02	5.64E+02	5	4	5
262	17.535	24.181	5	1.99E+02	4.43E+02	8.32E+02	6	5	6
272	17.654	24.088	5	1.54E+01	4.29E+01	7.67E+01	2	1	2
274	17.554	23.728	5	6.73E+00	8.23E+00	1.85E+01	2	1	1
275	17.659	23.893	5	7.05E+00	1.43E+01	2.75E+01	2	1	2
276	17.445	23.969	5	1.01E+02	2.19E+02	4.14E+02	5	4	4
277	17.554	23.921	5	3.35E+01	7.38E+01	1.39E+02	2	1	3
278	17.752	24.260	5	5.55E-04	6.31E-01	9.02E-01	1	1	1
280	17.642	24.022	5	1.68E+01	4.57E+01	8.21E+01	2	1	2
281	17.580	24.093	5	6.77E+01	1.74E+02	3.16E+02	3	2	4
283	17.536	23.658	5	4.60E+00	4.88E+00	1.16E+01	1	1	1
284	17.455	23.844	5	3.94E+01	7.47E+01	1.46E+02	2	1	3
286	17.668	23.823	5	4.26E+00	6.25E+00	1.32E+01	1	1	1
288	17.572	23.825	5	1.38E+01	2.28E+01	4.64E+01	2	1	2
289	17.538	23.994	5	6.40E+01	1.55E+02	2.85E+02	3	2	4
299	16.908	25.062	5	4.22E+01	7.29E+01	1.46E+02	2	1	3
358	16.830	25.172	5	5.87E+01	2.68E+02	4.42E+02	3	2	4
365	16.690	25.195	5	1.41E-05	0.00E+00	1.41E-05	1	1	1
4 rounds at aimpoint (11.70, 23.25)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
4 rounds at aimpoint (11.70, 23.25)									
371	11.800	22.452	5	9.71E-01	1.64E+03	2.34E+03			7
372	12.048	22.765	5	9.46E-03	3.88E+02	5.54E+02			5
373	11.734	22.345	5	0.00E+00	8.18E+00	1.17E+01			1
444	11.829	22.324	5	8.46E-05	2.11E+02	3.01E+02			4

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

APPENDIX G

LIGHT INFANTRY BRIGADE, DEFENSE

Appendix G: Light Infantry Brigade, Defense

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Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location	
1 Abn Inf Bn	Bde HHC		Cmd, S-2, S-3 Tac CP	FSE	436	8	Bde Tac CP	
					166	7	Bde Tac CP	
			Cmd, S-1, S-2, S-3 Tac CP, S-4	FSE	231	10	Bde Main CP	
					232	10	Bde Main CP	
			ADA, IEW, Co Hq		233	10	Bde Main CP	
			Commo (47)		234	10	Bde Main CP	
					235	10	Bde Main CP	
			MI Co (12)		236	10	Bde Main CP	
			Sig Plt (40)		1	10	Bde Main CP	
			MP Plt (21)		2	10	Bde Main CP	
					3	10	Bde Main CP	
					4	10	Bde Main CP	
					5	10	Bde Main CP	
					6	10	Bde Main CP	
	HHC		Cmd, S-2, S-3 Tac CP	FSE	437	8	1 Bn Tac CP	
					167	7	1 Bn Tac CP	
			Cmd, S-2, S-3		396	7	Main CP	
			Tac CP, Co Hq,	FSE	397	7	Main CP	
					168	7	Main CP	
					169	7	Main CP	
S-1, S-4,				237	10	Cbt Trains		
HHC HHC	BN Med Plt	Maint		238	10	Cbt Trains		
				239	10	Cbt Trains		
				7	10	Cbt Trains		
				8	10	Cbt Trains		
				9	10	Cbt Trains		
		S-1, S-4, Co Hq,		240	10	Fld Trains		
		HHC	Bn Sprt Plt	Maint		241	10	Fld Trains
						242	10	Fld Trains
						10	10	Fld Trains
						11	10	Fld Trains

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon # 12	Crew 10	Location Fld Trains
1 Abn Inf Bn	HHC	Scout Plt	Hq, FO, Morts,		363	10	R&S Line
					13	10	R&S Line
	HHC	Mort Plt			398	7	Mort area
					399	7	Mort area
					170	7	Mort area
					171	7	Mort area
	1-A Rifle Co (+)				400	7	Co Area
					401	7	Co Area
					172	7	Co Area
					173	7	Co Area
1 Abn Inf Bn	1-A Rifle Co (+)	1-A-1 Rifle Plt		243	10	Plt Area	
				244	10	Plt Area	
				14	10	Plt Area	
				15	10	Plt Area	
		1-A-2 Rifle Plt		245	10	Plt Area	
				246	10	Plt Area	
	1-A Rifle Co (+)	1-A-3 Rifle Plt		16	10	Plt Area	
				17	10	Plt Area	
	1-A Rifle Co (+)	1-A-3 Rifle Plt		247	10	Plt Area	
				248	10	Plt Area	
			18	10	Plt Area		
			19	10	Plt Area		
1 Abn Inf Bn	1-A Rifle Co (+)	1-D-1 AA Plt		249	10	A Co Area	
				20	10	A Co Area	
		1-D-2 AA Plt		250	10	A Co Area	
				21	10	A Co Area	
	1-B Rifle Co		Hq, FO, Morts		402	7	Co Area
					403	7	Co Area
				174	7	Co Area	
				175	7	Co Area	
1-B-1 Rifle Plt			251	10	Plt Area		
			252	10	Plt Area		
			22	10	Plt Area		
			23	10	Plt Area		

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location	
1 Abn Inf Bn	1-B Rifle Co	1-B-2 Rifle Plt	Hq, FO, Morts,		253	10	Plt Area	
					254	10	Plt Area	
					24	10	Plt Area	
					25	10	Plt Area	
		1-B-3 Rifle Plt			255	10	Plt Area	
					256	10	Plt Area	
					26	10	Plt Area	
					27	10	Plt Area	
		1-D-3 AA Plt			257	10	Co Area	
					28	10	Co Area	
					258	10	Co Area	
					29	10	Co Area	
1 Abn Inf Bn	1-C Rifle Co		Hq, FO, Morts,		404	7	Co Area	
					405	7	Co Area	
					176	7	Co Area	
					177	7	Co Area	
	1-C-1 Rifle Plt				259	10	Plt Area	
					260	10	Plt Area	
					30	10	Plt Area	
					31	10	Plt Area	
	1-C-2 Rifle Plt				261	10	Plt Area	
					262	10	Plt Area	
					32	10	Plt Area	
					33	10	Plt Area	
	1-C-3 Rifle Plt				263	10	Plt Area	
					264	10	Plt Area	
					34	10	Plt Area	
					35	10	Plt Area	
	1-C Rifle Co				1-D-5 AA Plt	265	10	Co Area
						36	10	Co Area
2 Abn Inf Bn	HHC		Cmd, S-2, S-3	FSE	438	8	Tac CP	
					Tac CP,	178	7	Tac CP
					Cmd, S-2, S-3,	406	7	Main CP
2 Abn Inf Bn	HHC	1-D-5 AA Plt	FSE, Tac CP, Co Hq,		407	7	Main CP	
					179	7	Main CP	

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon # 180	Crew 7	Location Main CP
			S-1, S-4,		266	10	Cbt Trains
	HHC	Bn Med Plt	Maint		267	10	Cbt Trains
					268	10	Cbt Trains
					37	10	Cbt Trains
	HHC				38	10	Cbt Trains
					39	10	Cbt Trains
			S-1, S-4, Co Hq,		269	10	Fld Trains
	HHC	Bn Sprt Plt	Maint		270	10	Fld Trains
					271	10	Fld Trains
					40	10	Fld Trains
					41	10	Fld Trains
					42	10	Fld Trains
	HHC	Scout Plt			272	10	R&S Line
					43	10	R&S Line
		Mort Plt			408	7	Mort area
					409	7	Mort area
					181	7	Mort area
					182	7	Mort area
2 Abn Inf Bn	2-A Rifle Co		Hq, FO, Morts		410	7	Co Area
					411	7	Co Area
					183	7	Co Area
					184	7	Co Area
2 Abn Inf Bn	2-A Rifle Co	2-A-1 Rifle Plt			273	10	Plt Area
		2-A-1 Rifle Plt			274	10	Plt Area
					44	10	Plt Area
					45	10	Plt Area
		2-A-2 Rifle Plt			275	10	Plt Area
					276	10	Plt Area
					46	10	Plt Area
					47	10	Plt Area
		2-A-3 Rifle Plt			277	10	Plt Area
					278	10	Plt Area
					48	10	Plt Area
					49	10	Plt Area

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location	
2 Abn Inf Bn	2-A Rifle Co	2-D-1 AA Plt			279	10	Co Area	
					50	10	Co Area	
		2-D-2 AA Plt			51	10	Co Area	
2 Abn Inf Bn	2-B Rifle Co		Hq, FO, Morts		412	7	Co Area	
					413	7	Co Area	
					185	7	Co Area	
					186	7	Co Area	
		2-B-1 Rifle Plt			280	10	Plt Area	
					281	10	Plt Area	
					52	10	Plt Area	
					53	10	Plt Area	
		2-B-2 Rifle Plt			282	10	Plt Area	
					283	10	Plt Area	
					54	10	Plt Area	
					55	10	Plt Area	
2 Abn Inf Bn	2-B Rifle Co	2-B-3 Rifle Plt			284	10	Plt Area	
					285	10	Plt Area	
					56	10	Plt Area	
					57	10	Plt Area	
	2-B Rifle Co	2-D-3 AA Plt			286	10	Co Area	
					58	10	Co Area	
		2-D-4 AA Plt			287	10	Co Area	
					59	10	Co Area	
2 Abn Inf Bn	2-C Rifle Co		Hq, FO, Morts		414	7	Bde res	
					415	7	Bde res	
					187	7	Bde res	
					188	7	Bde res	
2 Abn Inf Bn	2-C Rifle Co	2-C-1 Rifle Plt			288	10	Bde res	
					289	10	Bde res	
					60	10	Bde res	
					61	10	Bde res	
		2-C-2 Rifle Plt			290	10	Bde res	
					291	10	Bde res	
					62	10	Bde res	
					63	10	Bde res	

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location
3 Abn Inf Bn	2-C Rifle Co	2-C-3 Rifle Plt			292	10	Bde res
					293	10	Bde res
		64			10	Bde res	
		65			10	Bde res	
		2-D-5 AA Plt			294	10	Bde res
		66			10	Bde res	
	2-C Rifle Co	2-D-5 AA Plt	Cmd, S-2, S-3	FSE	439	8	Tac CP
					Tac CP,	189	7
		Cmd, S-2, S-3,	416		7	Main CP	
		FSE, Tac CP, Co Hq,	417		7	Main CP	
			190		7	Main CP	
			191		7	Main CP	
		S-1, S-4,	295		10	Cbt Trains	
		Bn Med Plt	Maint		296	10	Cbt Trains
					297	10	Cbt Trains
					67	10	Cbt Trains
68	10			Cbt Trains			
69	10			Cbt Trains			
3 Abn Inf Bn		S-1, S-4, Co Hq,		298	10	Fld Trains	
	Bn Sprt Plt	Maint		299	10	Fld Trains	
				300	10	Fld Trains	
				70	10	Fld Trains	
				71	10	Fld Trains	
				72	10	Fld Trains	
	Scout Plt			301	10	R&S Line	
				73	10	R&S Line	
		Mort Plt			418	7	Mort area
			419	7	Mort area		
			192	7	Mort area		
			193	7	Mort area		
3 Abn Inf Bn	3-A Rifle Co	Mort Plt	Hq, FO, Morts	420	7	Co Area	
				421	7	Co Area	
				194	7	Co Area	
				195	7	Co Area	

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location
3 Abn Inf Bn	3-A Rifle Co	3-A-1 Rifle Plt	Hq, FO, Morts		302	10	Plt Area
					303	10	Plt Area
					74	10	Plt Area
					75	10	Plt Area
		3-A-2 Rifle Plt			304	10	Plt Area
					305	10	Plt Area
					76	10	Plt Area
					77	10	Plt Area
		3-A-3 Rifle Plt			306	10	Plt Area
					307	10	Plt Area
					78	10	Plt Area
					79	10	Plt Area
	3-A Rifle Co	3-D-1 AA Plt		308	10	Co Area	
				80	10	Co Area	
	3-A Rifle Co	3-D-2 AA Plt		309	10	Co Area	
				81	10	Co Area	
	3 Abn Inf Bn	3-B Rifle Co	Hq, FO, Morts		422	7	Co Area
					423	7	Co Area
					196	7	Co Area
					197	7	Co Area
	3 Abn Inf Bn	3-B Rifle Co	3-B-1 Rifle Plt		310	10	Plt Area
					311	10	Plt Area
					82	10	Plt Area
					83	10	Plt Area
3-B-2 Rifle Plt				312	10	Plt Area	
				313	10	Plt Area	
				84	10	Plt Area	
				85	10	Plt Area	
3-B-3 Rifle Plt				314	10	Plt Area	
				315	10	Plt Area	
				86	10	Plt Area	
				87	10	Plt Area	
3-D-3 AA Plt				316	10	Co Area	
				88	10	Co Area	
3-D-4 AA Plt				317	10	Co Area	

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon # 89	Crew 10	Location Co Area
3 Abn Inf Bn	3-C Rifle Co		Hq, FO, Morts		424	7	Co Area
					425	7	Co Area
					198	7	Co Area
					199	7	Co Area
	3-C Rifle Co	3-C-1 Rifle Plt			318	10	Plt Area
					319	10	Plt Area
	3-C Rifle Co				90	10	Plt Area
					91	10	Plt Area
	3-C Rifle Co	3-C-2 Rifle Plt			320	10	Plt Area
					321	10	Plt Area
					92	10	Plt Area
					93	10	Plt Area
3 Abn Inf Bn	3-C Rifle Co	3-C-3 Rifle Plt	3-C-3 Rifle Plt		322	10	Plt Area
					323	10	Plt Area
					94	10	Plt Area
					95	10	Plt Area
Arty Bn	3-C Rifle Co	3-D-5 AA Plt			324	10	Co Area
					96	10	Co Area
	HHB	Svc Plt	Cmd, Co, Op-Int, AD		325	10	Arty CP
					326	10	Arty CP
					327	10	Arty CP
					328	10	Arty CP
					97	10	Arty CP
					98	10	Arty CP
					99	10	Arty CP
					100	10	Arty CP
		Bn Sprt Plt	Batt Hq		329	10	Arty Trains
		Svc Plt	Med, Amm		330	10	Arty Trains
					331	10	Arty Trains
					332	10	Arty Trains
					333	10	Arty Trains
					101	10	Arty Trains
					102	10	Arty Trains
					103	10	Arty Trains
					104	10	Arty Trains
					105	10	Arty Trains

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location
Arty Bn	A Arty Batt				334	10	Batt Posn
					335	10	Batt Posn
					336	10	Batt Posn
					337	10	Batt Posn
					106	10	Batt Posn
Arty Bn	A Arty Batt	Svc Plt			107	10	Batt Posn
					108	10	Batt Posn
					109	10	Batt Posn
	B Arty Batt				338	10	Batt Posn
					339	10	Batt Posn
					340	10	Batt Posn
					341	10	Batt Posn
					110	10	Batt Posn
					111	10	Batt Posn
					112	10	Batt Posn
					113	10	Batt Posn
	C Arty Batt				342	10	Batt Posn
					343	10	Batt Posn
					344	10	Batt Posn
					345	10	Batt Posn
					114	10	Batt Posn
					115	10	Batt Posn
					116	10	Batt Posn
					117	10	Batt Posn
Arty Bn	Eng Co (+)		Co hq, medic,		346	10	near Airstrip
					347	10	near Airstrip
					118	10	near Airstrip
					119	10	near Airstrip
		1 Eng Plt			426	7	near Airstrip
					427	7	near Airstrip
					200	7	near Airstrip
					201	7	near Airstrip
Arty Bn	Eng Co (+)	2 Eng Plt			428	7	near Airstrip
					429	7	near Airstrip
					202	7	near Airstrip
Arty Bn	Eng Co (+)	2 Eng Plt			203	7	near Airstrip
		3 Eng Plt			430	7	1st Abn Bn Area
					431	7	1st Abn Bn Area
					204	7	1st Abn Bn Area
					205	7	1st Abn Bn Area

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location		
	ADA Batt (-)		Batt Hq, Maint,Vulcan		348	10	BSA		
					120	10	BSA		
	MI Co (-)	GSR Plt			440	8	R&S Line		
					441	8	R&S Line		
					208	8	R&S Line		
					209	8	R&S Line		
					442	8	Bde Main CP		
					210	8	Bde Main CP		
	Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,		349	10	Bde Rear CP		
					350	10	Bde Rear CP		
					351	10	Bde Rear CP		
					352	10	Bde Rear CP		
					121	10	Bde Rear CP		
					122	10	Bde Rear CP		
					123	10	Bde Rear CP		
					124	10	Bde Rear CP		
							80		
					Sig Det		353	10	BSA
							354	10	BSA
							355	10	BSA
							356	10	BSA
							125	10	BSA
					Bde HHC (Rear)	Maint, MI Det			126
	127	10	BSA						
	128	10	BSA						
	Lt Armor Co		Co Hq, Bn Sprt Pkg		432	7	Armor Co CP		
					433	7	Armor Co CP		
					206	7	Armor Co CP		
					207	7	Armor Co CP		
					2 Armor Plt		221	8	1 Inf Bn Area
							222	8	1 Inf Bn Area
					2 Armor Plt		223	8	2 Inf Bn Area
							224	8	2 Inf Bn Area
					3 Armor Plt		225	8	Bde res Area
							226	8	Bde res Area

Table G1
Brigade Description by Tactical Layout
Light Infantry Brigade, Defense

Battalion	Company	Platoon	Section	Element	Icon #	Crew	Location
Fwd Sprt Bn			Hq Det		443	8	BSA
					444	8	BSA
					445	8	BSA
					211	8	BSA
					212	8	BSA
					213	8	BSA
	Med Co				446	8	BSA
					447	8	BSA
					448	8	BSA
					214	8	BSA
					215	8	BSA
					216	8	BSA
Fwd Sprt Bn	Supply Co	3 Armor Plt			357	10	BSA
	Supply Co				358	10	BSA
					359	10	BSA
					129	10	BSA
Fwd Sprt Bn	Supply Co				130	10	BSA
					131	10	BSA
	Maint Co				360	10	BSA
<div>Notes:</div> <div>FLD TRN: In brigade with FSB</div> <div>CBT TRN: In battalion near rear</div> <div>MAINT: In battalion near rear</div> <div>In BSA: BDE HHC</div> <div>FSB</div> <div>FLD TRN</div>					361	10	BSA
					362	10	BSA
					132	10	BSA
					133	10	BSA
					134	10	BSA

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
1	6.093	14.476	10	1	Bde Main CP		Bde HHC	Sig Plt (40)				
2	6.092	14.323	10	1	Bde Main CP		Bde HHC	MP Plt (21)				
3	6.056	14.272	10	1	Bde Main CP		Bde HHC	MP Plt (21)				
4	5.928	14.340	10	1	Bde Main CP		Bde HHC	MP Plt (21)				
5	5.996	14.233	10	1	Bde Main CP		Bde HHC	MP Plt (21)				
6	5.940	14.453	10	1	Bde Main CP		Bde HHC	MP Plt (21)				
7	6.585	14.474	10	1	Cbt Trains	1 Abn Inf Bn	HHC	Bn Med Plt	Maint			
8	6.596	14.509	10	1	Cbt Trains	1 Abn Inf Bn	HHC	Bn Med Plt	Maint			
9	6.650	14.552	10	1	Cbt Trains	1 Abn Inf Bn	HHC	Bn Med Plt	Maint			
10	5.849	14.797	10	1	Fld Trains	1 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
11	5.840	14.745	10	1	Fld Trains	1 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
12	5.853	14.870	10	1	Fld Trains	1 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
13	7.493	16.157	10	1	R&S Line	1 Abn Inf Bn	HHC	SCout Plt				
14	8.023	13.873	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-1 Rifle Plt				
15	7.973	14.025	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-1 Rifle Plt				
16	7.673	14.185	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-2 Rifle Plt				
17	7.567	14.260	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-2 Rifle Plt				
18	7.651	14.598	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-3 Rifle Plt				
19	7.559	14.741	10	1	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-3 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
20	7.494	14.816	10	1	A Co Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-D-1 AA Plt				
21	7.865	14.119	10	1	A Co Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-D-2 AA Plt				
22	7.105	15.339	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-1 Rifle Plt				
23	6.977	15.551	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-1 Rifle Plt				
24	7.408	14.972	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-2 Rifle Plt				
25	7.275	15.120	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-2 Rifle Plt				
26	6.794	15.032	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-3 Rifle Plt				
27	6.641	15.084	10	1	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-3 Rifle Plt				
28	6.960	14.900	10	1	Co Area	1 Abn Inf Bn	1-D-3 AA Plt					
29	7.098	15.437	10	1	Co Area	1 Abn Inf Bn	1-D-4 AA Plt					
30	6.729	15.784	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-1 Rifle Plt				
31	6.590	15.868	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-1 Rifle Plt				
32	6.409	15.662	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-2 Rifle Plt				
33	6.293	15.680	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-2 Rifle Plt				
34	6.177	16.004	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-3 Rifle Plt				
35	5.984	15.987	10	1	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-3 Rifle Plt				
36	6.098	15.997	10	1	Co Area	1 Abn Inf Bn	1-C Rifle Co	1-D-5 AA Plt				
37	7.529	13.326	10	1	Cbt Trains	2 Abn Inf Bn	HHC	Bn Med Plt	Maint			
38	7.483	13.327	10	1	Cbt Trains	2 Abn Inf Bn	HHC	Bn Med Plt	Maint			

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
39	7.413	13.314	10	1	Cbt Trains	2 Abn Inf Bn	HHC	Bn Med Plt	Maint			
40	5.550	13.245	10	1	Fld Trains	2 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
41	5.474	13.201	10	1	Fld Trains	2 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
42	5.507	13.288	10	1	Fld Trains	2 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
43	8.657	12.270	10	1	R&S Line	2 Abn Inf Bn	HHC	SCout Plt				
44	8.029	13.502	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-1 Rifle Plt				
45	8.010	13.277	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-1 Rifle Plt				
46	7.967	13.123	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-2 Rifle Plt				
47	7.951	12.959	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-2 Rifle Plt				
48	7.859	12.806	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-3 Rifle Plt				
49	7.819	12.680	10	1	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-3 Rifle Plt				
50	8.022	13.625	10	1	Co Area	2 Abn Inf Bn	2-A Rifle Co	2-D-1 AA Plt				
51	7.918	13.025	10	1	Co Area	2 Abn Inf Bn	2-A Rifle Co	2-D-2 AA Plt				
52	7.782	12.305	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-1 Rifle Plt				
53	7.849	12.489	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-1 Rifle Plt				
54	7.712	12.136	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-2 Rifle Plt				
55	7.633	11.994	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-2 Rifle Plt				
56	7.360	11.854	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-3 Rifle Plt				
57	7.025	11.693	10	1	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-3 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
58	6.946	11.700	10	1	Co Area	2 Abn Inf Bn	2-B Rifle Co	2-D-3 AA Plt				
59	7.642	12.314	10	1	Co Area	2 Abn Inf Bn	2-B Rifle Co	2-D-4 AA Plt				
60	7.504	13.516	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-1 Rifle Plt				
61	7.349	13.661	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-1 Rifle Plt				
62	7.197	13.780	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-2 Rifle Plt				
63	7.038	13.813	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-2 Rifle Plt				
64	6.971	13.252	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-3 Rifle Plt				
65	7.147	13.222	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-3 Rifle Plt				
66	6.985	13.799	10	1	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-D-5 AA Plt				
67	5.560	12.798	10	1	Cbt Trains	3 Abn Inf Bn		Bn Med Plt	Maint			
68	5.483	12.959	10	1	Cbt Trains	3 Abn Inf Bn		Bn Med Plt	Maint			
69	5.563	12.908	10	1	Cbt Trains	3 Abn Inf Bn		Bn Med Plt	Maint			
70	5.463	12.826	10	1	Fld Trains	3 Abn Inf Bn		Bn Sprt Plt	Maint			
71	5.648	12.900	10	1	Fld Trains	3 Abn Inf Bn		Bn Sprt Plt	Maint			
72	5.451	12.890	10	1	Fld Trains	3 Abn Inf Bn		Bn Sprt Plt	Maint			
73	5.605	10.601	10	1	R&S Line	3 Abn Inf Bn		SCout Plt				
74	6.419	11.658	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-1 Rifle Plt				
75	6.278	11.645	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-1 Rifle Plt				
76	5.720	11.676	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-2 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
77	5.601	11.699	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-2 Rifle Plt				
78	5.331	11.805	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-3 Rifle Plt				
79	5.184	11.887	10	1	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-3 Rifle Plt				
80	6.177	11.646	10	1	Co Area	3 Abn Inf Bn	3-A Rifle Co	3-D-1 AA Plt				
81	5.121	11.999	10	1	Co Area	3 Abn Inf Bn	3-A Rifle Co	3-D-2 AA Plt				
82	4.782	12.418	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-1 Rifle Plt				
83	4.701	12.596	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-1 Rifle Plt				
84	4.595	13.057	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-2 Rifle Plt				
85	4.610	13.426	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-2 Rifle Plt				
86	4.590	13.873	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-3 Rifle Plt				
87	4.622	14.157	10	1	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-3 Rifle Plt				
88	4.642	14.033	10	1	Co Area			3-D-3 AA Plt				
89	4.604	13.250	10	1	Co Area			3-D-4 AA Plt				
90	4.691	14.480	10	1	Plt Area		3-C Rifle Co	3-C-1 Rifle Plt				
91	4.734	14.632	10	1	Plt Area		3-C Rifle Co	3-C-1 Rifle Plt				
92	4.925	15.009	10	1	Plt Area		3-C Rifle Co	3-C-2 Rifle Plt				
93	5.004	15.122	10	1	Plt Area		3-C Rifle Co	3-C-2 Rifle Plt				
94	5.423	15.512	10	1	Plt Area		3-C Rifle Co	3-C-3 Rifle Plt				
95	5.601	15.674	10	1	Plt Area		3-C Rifle Co	3-C-3 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
96	5.747	15.847	10	1	Co Area		3-C Rifle Co	3-D-5 AA Plt				
97	5.610	14.388	10	1	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
98	5.554	14.447	10	1	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
99	5.616	14.500	10	1	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
100	5.667	14.564	10	1	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
101	5.392	13.905	10	1	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
102	5.474	13.777	10	1	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
103	5.406	13.666	10	1	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
104	5.461	13.842	10	1	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
105	5.476	13.706	10	1	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
106	5.642	13.947	10	1	Batt Posn	Arty Bn	A Arty Batt					
107	5.653	13.814	10	1	Batt Posn	Arty Bn	A Arty Batt					
108	5.627	14.130	10	1	Batt Posn	Arty Bn	A Arty Batt					
109	5.702	14.036	10	1	Batt Posn	Arty Bn	A Arty Batt					
110	5.702	12.379	10	1	Batt Posn	Arty Bn	B Arty Batt					
111	5.784	12.296	10	1	Batt Posn	Arty Bn	B Arty Batt					
112	5.875	12.255	10	1	Batt Posn	Arty Bn	B Arty Batt					
113	5.966	12.148	10	1	Batt Posn	Arty Bn	B Arty Batt					
114	6.916	12.806	10	1	Batt Posn	Arty Bn	C Arty Batt					

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
115	6.830	12.828	10	1	Batt Posn	Arty Bn	C Arty Batt					
116	6.756	12.888	10	1	Batt Posn	Arty Bn	C Arty Batt					
117	6.725	12.972	10	1	Batt Posn	Arty Bn	C Arty Batt					
118	6.694	13.408	10	1	near Airstrip	Arty Bn	Eng Co (+)		Co hq, medic,			Assault&Barrier
119	6.704	13.497	10	1	near Airstrip	Arty Bn	Eng Co (+)		Co hq, medic,			Assault&Barrier
120	6.033	14.438	10	1	BSA	Arty Bn	ADA Batt (-)		Batt Hq, Maint,Vulcan			
121	6.032	12.989	10	1	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
122	5.929	12.964	10	1	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
123	6.033	12.883	10	1	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
124	5.934	12.874	10	1	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
125	5.888	13.090	10	1	BSA		Bde HHC (Rear)		Sig Det			
126	5.793	13.170	10	1	BSA		Bde HHC (Rear)		Sig Det			
127	5.789	13.080	10	1	BSA		Bde HHC (Rear)		Sig Det			
128	5.929	13.162	10	1	BSA		Bde HHC (Rear)		Sig Det			
129	6.018	13.474	10	1	BSA	Fwd Sprt Bn	Supply Co					
130	6.010	13.396	10	1	BSA	Fwd Sprt Bn	Supply Co					
131	6.016	13.310	10	1	BSA	Fwd Sprt Bn	Supply Co					
132	6.074	13.908	10	1	BSA	Fwd Sprt Bn	Maint Co					
133	6.062	13.731	10	1	BSA	Fwd Sprt Bn	Maint Co					

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
134	6.072	13.821	10	1	BSA	Fwd Sprt Bn	Maint Co					
166	7.334	13.972	7	3	Bde Tac CP		Bde HHC		Tac Cp			
167	7.026	14.663	7	3	1 Bn Tac CP	1 Abn Inf Bn	HHC		Tac Cp			
168	6.948	14.165	7	3	Main CP	1 Abn Inf Bn	HHC		Tac Cp, Co Hq,			Stinger Tm
169	6.942	14.288	7	3	Main CP	1 Abn Inf Bn	HHC		Tac Cp, Co Hq,			Stinger Tm
170	6.850	14.458	7	3	Mortar area	1 Abn Inf Bn	HHC	Mortar Plt				
171	6.764	14.472	7	3	Mortar area	1 Abn Inf Bn	HHC	Mortar Plt				
172	7.440	14.125	7	3	Co Area	1 Abn Inf Bn	1-A Rifle Co (+)		Hq, FO, mortars,			Stinger
173	7.436	14.236	7	3	Co Area	1 Abn Inf Bn	1-A Rifle Co (+)		Hq, FO, mortars,			Stinger
174	6.956	14.789	7	3	Co Area	1 Abn Inf Bn	1-B Rifle Co		Hq, FO, mortars			Stinger
175	6.863	14.788	7	3	Co Area	1 Abn Inf Bn	1-B Rifle Co		Hq, FO, mortars			Stinger
176	6.271	15.463	7	3	Co Area	1 Abn Inf Bn	1-C Rifle Co		Hq, FO, mortars,			Stinger
177	6.321	15.463	7	3	Co Area	1 Abn Inf Bn	1-C Rifle Co		Hq, FO, mortars,			Stinger
178	7.506	12.976	7	3	Tac CP	2 Abn Inf Bn	HHC		Tac Cp,			
179	7.131	13.038	7	3	Main CP	2 Abn Inf Bn	HHC		FSE, Tac Cp, Co Hq,			Stinger Team
180	7.141	12.989	7	3	Main CP	2 Abn Inf Bn	HHC					
181	7.054	12.577	7	3	Mortar area	2 Abn Inf Bn		Mortar Plt				
182	7.046	12.659	7	3	Mortar area	2 Abn Inf Bn		Mortar Plt				
183	7.746	13.395	7	3	Co Area	2 Abn Inf Bn	2-A Rifle Co		Hq, FO, mortars			Stinger

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
184	7.707	13.388	7	3	Co Area	2 Abn Inf Bn	2-A Rifle Co		Hq, FO, mortars			Stinger
185	7.463	12.752	7	3	Co Area	2 Abn Inf Bn	2-B Rifle Co		Hq, FO, mortars			Stinger
186	7.547	12.760	7	3	Co Area	2 Abn Inf Bn	2-B Rifle Co		Hq, FO, mortars			Stinger
187	7.033	13.512	7	3	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co		Hq, FO, mortars			Stinger
188	7.072	13.509	7	3	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co		Hq, FO, mortars			Stinger
189	5.211	12.855	7	3	Tac CP	3 Abn Inf Bn			Tac Cp,			
190	5.817	12.688	7	3	Main CP	3 Abn Inf Bn			FSE, Tac Cp, Co Hq,			Stinger
191	5.850	12.720	7	3	Main CP	3 Abn Inf Bn			FSE, Tac Cp, Co Hq,			Stinger
192	5.199	13.137	7	3	Mortar area	3 Abn Inf Bn		Mortar Plt				
193	5.224	13.195	7	3	Mortar area	3 Abn Inf Bn		Mortar Plt				
194	5.504	12.164	7	3	Co Area	3 Abn Inf Bn	3-A Rifle Co		Hq, FO, mortars			Stinger
195	5.583	12.163	7	3	Co Area	3 Abn Inf Bn	3-A Rifle Co		Hq, FO, mortars			Stinger
196	4.968	13.187	7	3	Co Area	3 Abn Inf Bn	3-B Rifle Co		Hq, FO, mortars			Stinger
197	5.033	13.123	7	3	Co Area	3 Abn Inf Bn	3-B Rifle Co		Hq, FO, mortars			Stinger
198	5.102	14.383	7	3	Co Area		3-C Rifle Co		Hq, FO, mortars			Stinger
199	5.115	14.389	7	3	Co Area		3-C Rifle Co		Hq, FO, mortars			Stinger
200	6.741	13.475	7	3	near Airstrip	Arty Bn	Eng Co (+)	1 Eng Plt				
201	6.796	13.214	7	3	near Airstrip	Arty Bn	Eng Co (+)	1 Eng Plt				
202	6.778	13.317	7	3	near Airstrip	Arty Bn	Eng Co (+)	2 Eng Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
203	6.788	13.359	7	3	near Airstrip	Arty Bn	Eng Co (+)	2 Eng Plt				
204	7.366	14.688	7	3	1st Abn Bn Area	Arty Bn	Eng Co (+)	3 Eng Plt				
205	7.305	14.755	7	3	1st Abn Bn Area	Arty Bn	Eng Co (+)	3 Eng Plt				
206	6.739	13.622	7	5	Armor Co CP		Lt Armor Co		Co Hq, Bn Sprt Pkg			
207	6.879	13.872	7	5	Armor Co CP		Lt Armor Co		Co Hq, Bn Sprt Pkg			
208	8.588	15.342	8	5	R&S Line	Arty Bn	MI Co (-)	GSR Plt				
209	8.908	13.545	8	5	R&S Line	Arty Bn	MI Co (-)	GSR Plt				
210	5.928	14.339	8	5	Bde Main CP	Arty Bn	MI Co (-)					Remote Sensor Teams
211	5.764	13.557	8	5	BSA	Fwd Sprt Bn			Hq Det			
212	5.766	13.622	8	5	BSA	Fwd Sprt Bn			Hq Det			
213	5.767	13.674	8	5	BSA	Fwd Sprt Bn			Hq Det			
214	5.958	13.839	8	5	BSA	Fwd Sprt Bn	Med Co					
215	5.913	13.903	8	5	BSA	Fwd Sprt Bn	Med Co					
216	5.912	13.851	8	5	BSA	Fwd Sprt Bn	Med Co					
221	7.179	14.934	8	8	1 Inf Bn Area		Lt Armor Co		2 Armor Plt			
222	7.741	14.419	8	8	1 Inf Bn Area		Lt Armor Co		2 Armor Plt			
223	7.988	13.720	8	8	2 Inf Bn Area		Lt Armor Co		2 Armor Plt			
224	7.958	13.236	8	8	2 Inf Bn Area		Lt Armor Co		2 Armor Plt			
225	7.429	13.719	8	8	Bde Reserve Area		Lt Armor Co		3 Armor Plt			

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
226	7.252	13.804	8	8	Bde Reserve Area		Lt Armor Co		3 Armor Plt			
231	5.991	14.398	10	2	Bde Main CP		Bde HHC		Cmd, S-1, S-2, S-3			
232	6.000	14.484	10	2	Bde Main CP		Bde HHC		Tac Cp, S-4	FSE		
233	6.059	14.191	10	2	Bde Main CP		Bde HHC		ADA, IEW, Co Hq			
234	6.048	14.352	10	2	Bde Main CP		Bde HHC		Commo (47)			
235	5.928	14.253	10	2	Bde Main CP		Bde HHC		Commo (47)			
236	5.995	14.318	10	2	Bde Main CP		Bde HHC		MI Co (12)			
237	6.729	14.564	10	2	Cbt Trains	1 Abn Inf Bn	HHC		S-1, S-4,			
238	6.663	14.478	10	2	Cbt Trains	1 Abn Inf Bn	HHC	Bn Med Plt	Maint			
239	6.637	14.483	10	2	Cbt Trains	1 Abn Inf Bn	HHC	Bn Med Plt	Maint			
240	5.917	14.848	10	2	Fld Trains	1 Abn Inf Bn	HHC		S-1, S-4, Co Hq,			
241	5.911	14.774	10	2	Fld Trains	1 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
242	5.917	14.700	10	2	Fld Trains	1 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
243	8.013	13.953	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-1 Rifle Plt				
244	7.946	14.060	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-1 Rifle Plt				
245	7.718	14.098	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-2 Rifle Plt				
246	7.515	14.327	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-2 Rifle Plt				
247	7.581	14.642	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-3 Rifle Plt				
248	7.672	14.528	10	2	Plt Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-A-3 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
249	7.873	14.201	10	2	A Co Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-D-1 AA Plt				
250	7.478	14.745	10	2	A Co Area	1 Abn Inf Bn	1-A Rifle Co (+)	1-D-2 AA Plt				
251	7.017	15.446	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-1 Rifle Plt				
252	7.155	15.299	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-1 Rifle Plt				
253	7.408	14.928	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-2 Rifle Plt				
254	7.311	15.085	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-2 Rifle Plt				
255	6.893	14.961	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-3 Rifle Plt				
256	6.712	15.037	10	2	Plt Area	1 Abn Inf Bn	1-B Rifle Co	1-B-3 Rifle Plt				
257	6.799	14.963	10	2	Co Area	1 Abn Inf Bn	1-D-3 AA Plt					
258	6.915	15.505	10	2	Co Area	1 Abn Inf Bn	1-D-4 AA Plt					
259	6.679	15.833	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-1 Rifle Plt				
260	6.524	15.940	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-1 Rifle Plt				
261	6.241	15.673	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-2 Rifle Plt				
262	6.476	15.623	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-2 Rifle Plt				
263	6.334	15.995	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-3 Rifle Plt				
264	6.044	15.980	10	2	Plt Area	1 Abn Inf Bn	1-C Rifle Co	1-C-3 Rifle Plt				
265	6.660	15.900	10	2	Co Area	1 Abn Inf Bn	1-C Rifle Co	1-D-5 AA Plt				
266	7.396	13.240	10	2	Cbt Trains	2 Abn Inf Bn	HHC		S-1, S-4,			
267	7.530	13.256	10	2	Cbt Trains	2 Abn Inf Bn	HHC	Bn Med Plt	Maint			

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
268	7.463	13.247	10	2	Cbt Trains	2 Abn Inf Bn	HHC	Bn Med Plt	Maint			
269	5.451	13.254	10	2	Fld Trains	2 Abn Inf Bn	HHC		S-1, S-4, Co Hq,			
270	5.514	13.209	10	2	Fld Trains	2 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
271	5.566	13.193	10	2	Fld Trains	2 Abn Inf Bn	HHC	Bn Sprt Plt	Maint			
272	8.925	13.445	10	2	R&S Line	2 Abn Inf Bn	HHC	SCout Plt				
273	8.034	13.567	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-1 Rifle Plt				
274	8.003	13.353	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-1 Rifle Plt				
275	7.943	13.085	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-2 Rifle Plt				
276	7.968	12.917	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-2 Rifle Plt				
277	7.863	12.777	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-3 Rifle Plt				
278	7.878	12.691	10	2	Plt Area	2 Abn Inf Bn	2-A Rifle Co	2-A-3 Rifle Plt				
279	7.995	13.442	10	2	Co Area	2 Abn Inf Bn	2-A Rifle Co	2-D-1 AA Plt				
280	7.857	12.530	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-1 Rifle Plt				
281	7.824	12.394	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-1 Rifle Plt				
282	7.724	12.188	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-2 Rifle Plt				
283	7.648	12.035	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-2 Rifle Plt				
284	7.275	11.825	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-3 Rifle Plt				
285	7.016	11.743	10	2	Plt Area	2 Abn Inf Bn	2-B Rifle Co	2-B-3 Rifle Plt				
286	7.480	11.946	10	2	Co Area	2 Abn Inf Bn	2-B Rifle Co	2-D-3 AA Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
287	7.125	11.776	10	2	Co Area	2 Abn Inf Bn	2-B Rifle Co	2-D-4 AA Plt				
288	7.478	13.592	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-1 Rifle Plt				
289	7.295	13.718	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-1 Rifle Plt				
290	7.130	13.786	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-2 Rifle Plt				
291	6.927	13.730	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-2 Rifle Plt				
292	7.057	13.229	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-3 Rifle Plt				
293	7.250	13.218	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-C-3 Rifle Plt				
294	7.092	13.854	10	2	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co	2-D-5 AA Plt				
295	5.413	12.882	10	2	Cbt Trains	3 Abn Inf Bn			S-1, S-4,			
296	5.537	12.816	10	2	Cbt Trains	3 Abn Inf Bn		Bn Med Plt	Maint			
297	5.496	12.799	10	2	Cbt Trains	3 Abn Inf Bn		Bn Med Plt	Maint			
298	5.561	12.909	10	2	Fld Trains	3 Abn Inf Bn			S-1, S-4, Co Hq,			
299	5.615	12.839	10	2	Fld Trains	3 Abn Inf Bn		Bn Sprt Plt	Maint			
300	5.608	12.984	10	2	Fld Trains	3 Abn Inf Bn		Bn Sprt Plt	Maint			
301	3.593	13.131	10	2	R&S Line	3 Abn Inf Bn		SCout Plt				
302	6.396	11.688	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-1 Rifle Plt				
303	6.276	11.651	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-1 Rifle Plt				
304	5.755	11.682	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-2 Rifle Plt				
305	5.635	11.734	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-2 Rifle Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
306	5.353	11.802	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-3 Rifle Plt				
307	5.207	11.849	10	2	Plt Area	3 Abn Inf Bn	3-A Rifle Co	3-A-3 Rifle Plt				
308	4.846	12.296	10	2	Co Area	3 Abn Inf Bn	3-A Rifle Co	3-D-1 AA Plt				
309	5.181	11.974	10	2	Co Area	3 Abn Inf Bn	3-A Rifle Co	3-D-2 AA Plt				
310	4.753	12.292	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-1 Rifle Plt				
311	4.701	12.491	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-1 Rifle Plt				
312	4.633	12.971	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-2 Rifle Plt				
313	4.617	13.310	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-2 Rifle Plt				
314	4.628	13.951	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-3 Rifle Plt				
315	4.617	14.139	10	2	Plt Area	3 Abn Inf Bn	3-B Rifle Co	3-B-3 Rifle Plt				
316	4.659	13.174	10	2	Co Area			3-D-3 AA Plt				
317	4.708	14.090	10	2	Co Area			3-D-4 AA Plt				
318	4.638	14.400	10	2	Plt Area		3-C Rifle Co	3-C-1 Rifle Plt				
319	4.779	14.681	10	2	Plt Area		3-C Rifle Co	3-C-1 Rifle Plt				
320	4.990	15.031	10	2	Plt Area		3-C Rifle Co	3-C-2 Rifle Plt				
321	5.097	15.098	10	2	Plt Area		3-C Rifle Co	3-C-2 Rifle Plt				
322	5.324	15.511	10	2	Plt Area		3-C Rifle Co	3-C-3 Rifle Plt				
323	5.639	15.789	10	2	Plt Area		3-C Rifle Co	3-C-3 Rifle Plt				
324	5.484	15.661	10	2	Co Area		3-C Rifle Co	3-D-5 AA Plt				

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
325	5.702	14.442	10	2	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
326	5.689	14.515	10	2	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
327	5.512	14.539	10	2	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
328	5.636	14.371	10	2	Arty CP	Arty Bn	HHB	Svc Plt	Cmd, Co, Op-Int, AD			
329	5.419	13.723	10	2	Arty Trains	Arty Bn		Bn Sprt Plt	Batt Hq			
330	5.408	13.795	10	2	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
331	5.493	13.630	10	2	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
332	5.361	13.699	10	2	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
333	5.363	13.843	10	2	Arty Trains	Arty Bn		Svc Plt	Med, Amm			
334	5.691	13.943	10	2	Batt Posn	Arty Bn	A Arty Batt					
335	5.690	14.073	10	2	Batt Posn	Arty Bn	A Arty Batt					
336	5.654	14.156	10	2	Batt Posn	Arty Bn	A Arty Batt					
337	5.627	13.811	10	2	Batt Posn	Arty Bn	A Arty Batt					
338	5.888	12.262	10	2	Batt Posn	Arty Bn	B Arty Batt					
339	5.993	12.248	10	2	Batt Posn	Arty Bn	B Arty Batt					
340	5.752	12.293	10	2	Batt Posn	Arty Bn	B Arty Batt					
341	5.706	12.340	10	2	Batt Posn	Arty Bn	B Arty Batt					
342	6.849	12.996	10	2	Batt Posn	Arty Bn	C Arty Batt					
343	6.900	12.944	10	2	Batt Posn	Arty Bn	C Arty Batt					

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
344	6.866	12.886	10	2	Batt Posn	Arty Bn	C Arty Batt					
345	6.785	13.015	10	2	Batt Posn	Arty Bn	C Arty Batt					
346	6.814	13.529	10	2	near Airstrip	Arty Bn	Eng Co (+)		Co hq, medic,			Assault&Barrier
347	6.740	13.527	10	2	near Airstrip	Arty Bn	Eng Co (+)		Co hq, medic,			Assault&Barrier
348	6.048	14.515	10	2	BSA	Arty Bn	ADA Batt (-)		Batt Hq, Maint,Vulcan			
349	6.052	12.911	10	2	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
350	6.039	13.007	10	2	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
351	5.955	12.889	10	2	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
352	5.960	12.980	10	2	Bde Rear CP		Bde HHC (Rear)	Maint, MI Det	S-1, S-4, Co Hq,			Commo, FAST, Mess,
353	5.884	13.058	10	2	BSA		Bde HHC (Rear)		Sig Det			
354	5.911	13.172	10	2	BSA		Bde HHC (Rear)		Sig Det			
355	5.823	13.093	10	2	BSA		Bde HHC (Rear)		Sig Det			
356	5.820	13.172	10	2	BSA		Bde HHC (Rear)		Sig Det			
357	6.039	13.482	10	2	BSA	Fwd Sprt Bn	Supply Co					
358	6.038	13.406	10	2	BSA	Fwd Sprt Bn	Supply Co					
359	6.041	13.323	10	2	BSA	Fwd Sprt Bn	Supply Co					
360	6.145	13.753	10	2	BSA	Fwd Sprt Bn	Maint Co					
361	6.165	13.823	10	2	BSA	Fwd Sprt Bn	Maint Co					
362	6.119	13.900	10	2	BSA	Fwd Sprt Bn	Maint Co					

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
363	8.542	15.410	10	2	R&S Line	1 Abn Inf Bn	HHC	SCout Plt				
396	7.061	14.186	7	4	Main CP	1 Abn Inf Bn	HHC		Cmd, S-2, S-3			
397	6.978	14.291	7	4	Main CP	1 Abn Inf Bn	HHC		Tac Cp, Co Hq,	FSE		
398	6.862	14.468	7	4	Mortar area	1 Abn Inf Bn	HHC	Mortar Plt				
399	6.809	14.467	7	4	Mortar area	1 Abn Inf Bn	HHC	Mortar Plt				
400	7.445	14.117	7	4	Co Area	1 Abn Inf Bn	1-A Rifle Co (+)		Hq, FO, mortars,			Stinger
401	7.445	14.229	7	4	Co Area	1 Abn Inf Bn	1-A Rifle Co (+)		Hq, FO, mortars,			Stinger
402	6.871	14.784	7	4	Co Area	1 Abn Inf Bn	1-B Rifle Co		Hq, FO, mortars			Stinger
403	6.970	14.787	7	4	Co Area	1 Abn Inf Bn	1-B Rifle Co		Hq, FO, mortars			Stinger
404	6.339	15.451	7	4	Co Area	1 Abn Inf Bn	1-C Rifle Co		Hq, FO, mortars,			Stinger
405	6.245	15.441	7	4	Co Area	1 Abn Inf Bn	1-C Rifle Co		Hq, FO, mortars,			Stinger
406	7.153	12.978	7	4	Main CP	2 Abn Inf Bn	HHC		Cmd, S-2, S-3,			
407	7.127	13.079	7	4	Main CP	2 Abn Inf Bn	HHC		FSE, Tac Cp, Co Hq,			Stinger Team
408	7.076	12.580	7	4	Mortar area	2 Abn Inf Bn		Mortar Plt				
409	7.073	12.680	7	4	Mortar area	2 Abn Inf Bn		Mortar Plt				
410	7.742	13.383	7	4	Co Area	2 Abn Inf Bn	2-A Rifle Co		Hq, FO, mortars			Stinger
411	7.804	13.386	7	4	Co Area	2 Abn Inf Bn	2-A Rifle Co		Hq, FO, mortars			Stinger
412	7.534	12.774	7	4	Co Area	2 Abn Inf Bn	2-B Rifle Co		Hq, FO, mortars			Stinger
413	7.448	12.779	7	4	Co Area	2 Abn Inf Bn	2-B Rifle Co		Hq, FO, mortars			Stinger

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
414	7.030	13.452	7	4	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co		Hq, FO, mortars			Stinger
415	7.077	13.448	7	4	Bde Reserve	2 Abn Inf Bn	2-C Rifle Co		Hq, FO, mortars			Stinger
416	5.798	12.686	7	4	Main CP	3 Abn Inf Bn			Cmd, S-2, S-3,			
417	5.881	12.714	7	4	Main CP	3 Abn Inf Bn			FSE, Tac Cp, Co Hq,			Stinger
418	5.228	13.115	7	4	Mortar area	3 Abn Inf Bn		Mortar Plt				
419	5.264	13.099	7	4	Mortar area	3 Abn Inf Bn		Mortar Plt				
420	5.601	12.207	7	4	Co Area	3 Abn Inf Bn	3-A Rifle Co		Hq, FO, mortars			Stinger
421	5.517	12.227	7	4	Co Area	3 Abn Inf Bn	3-A Rifle Co		Hq, FO, mortars			Stinger
422	4.992	13.086	7	4	Co Area	3 Abn Inf Bn	3-B Rifle Co		Hq, FO, mortars			Stinger
423	4.962	13.219	7	4	Co Area	3 Abn Inf Bn	3-B Rifle Co		Hq, FO, mortars			Stinger
424	5.069	14.379	7	4	Co Area		3-C Rifle Co		Hq, FO, mortars			Stinger
425	5.100	14.393	7	4	Co Area		3-C Rifle Co		Hq, FO, mortars			Stinger
426	6.795	13.441	7	4	near Airstrip	Arty Bn	Eng Co (+)	1 Eng Plt				
427	6.756	13.385	7	4	near Airstrip	Arty Bn	Eng Co (+)	1 Eng Plt				
428	6.744	13.296	7	4	near Airstrip	Arty Bn	Eng Co (+)	2 Eng Plt				
429	6.741	13.225	7	4	near Airstrip	Arty Bn	Eng Co (+)	2 Eng Plt				
430	7.285	14.750	7	4	1st Abn Bn Area	Arty Bn	Eng Co (+)	3 Eng Plt				
431	7.386	14.670	7	4	1st Abn Bn Area	Arty Bn	Eng Co (+)	3 Eng Plt				
432	6.970	13.918	7	4	Armor Co CP		Lt Armor Co		Co Hq, Bn Sprt Pkg			

Table G2
Brigade Description by Icon Number
Light Infantry Brigade, Defense

Icon #	X-Coord (X-wind)	Y-Coord (Upwind)	Crew	Icon Type	Location	Battalion	Company	Platoon	Section	Element	Squad	Team
433	6.824	14.074	7	4	Armor Co CP		Lt Armor Co		Co Hq, Bn Sprt Pkg			
436	7.339	13.972	8	6	Bde Tac CP		Bde HHC		Cmd, S-2, S-3	FSE		
437	7.031	14.651	8	6	1 Bn Tac CP	1 Abn Inf Bn	HHC		Cmd, S-2, S-3	FSE		
438	7.510	12.983	8	6	Tac CP	2 Abn Inf Bn	HHC		Cmd, S-2, S-3	FSE		
439	5.211	12.851	8	6	Tac CP	3 Abn Inf Bn			Cmd, S-2, S-3	FSE		
440	7.567	16.192	8	6	R&S Line	Arty Bn	MI Co (-)	GSR Plt				
441	8.628	12.179	8	6	R&S Line	Arty Bn	MI Co (-)	GSR Plt				
442	5.998	14.225	8	6	Bde Main CP	Arty Bn	MI Co (-)					Remote Sensor Teams
443	5.724	13.641	8	6	BSA	Fwd Sprt Bn			Hq Det			
444	5.772	13.525	8	6	BSA	Fwd Sprt Bn			Hq Det			
445	5.724	13.585	8	6	BSA	Fwd Sprt Bn			Hq Det			
446	5.932	13.871	8	6	BSA	Fwd Sprt Bn	Med Co					
447	5.920	13.941	8	6	BSA	Fwd Sprt Bn	Med Co					
448	5.927	13.817	8	6	BSA	Fwd Sprt Bn	Med Co					

Note: Icon Type refers to the unwarned posture.

Figure G1
Brigade Layout: Standard Scale
Light Infantry Brigade, Defense

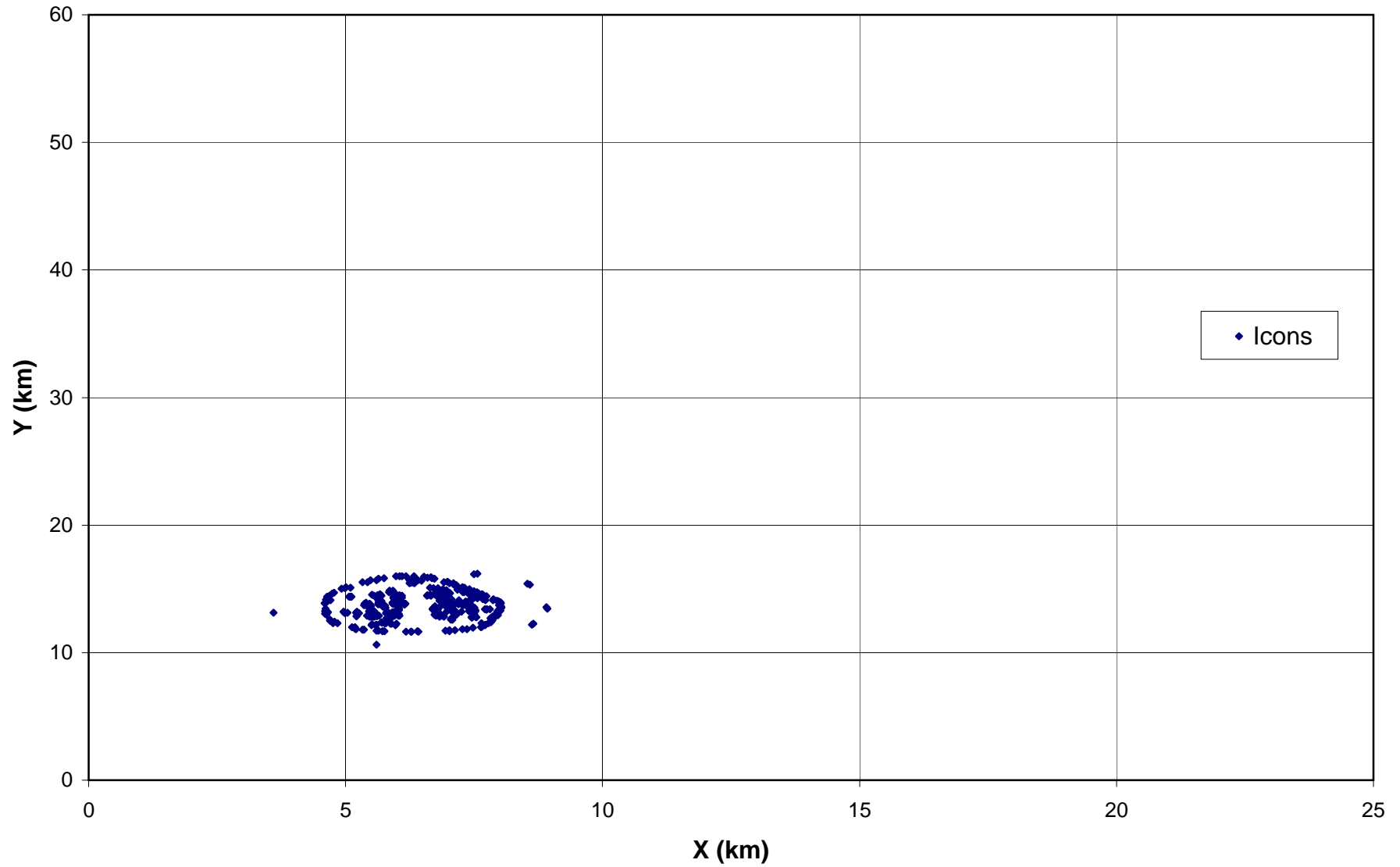


Figure G2
Brigade Layout: Small Scale
Light Infantry Brigade, Defense

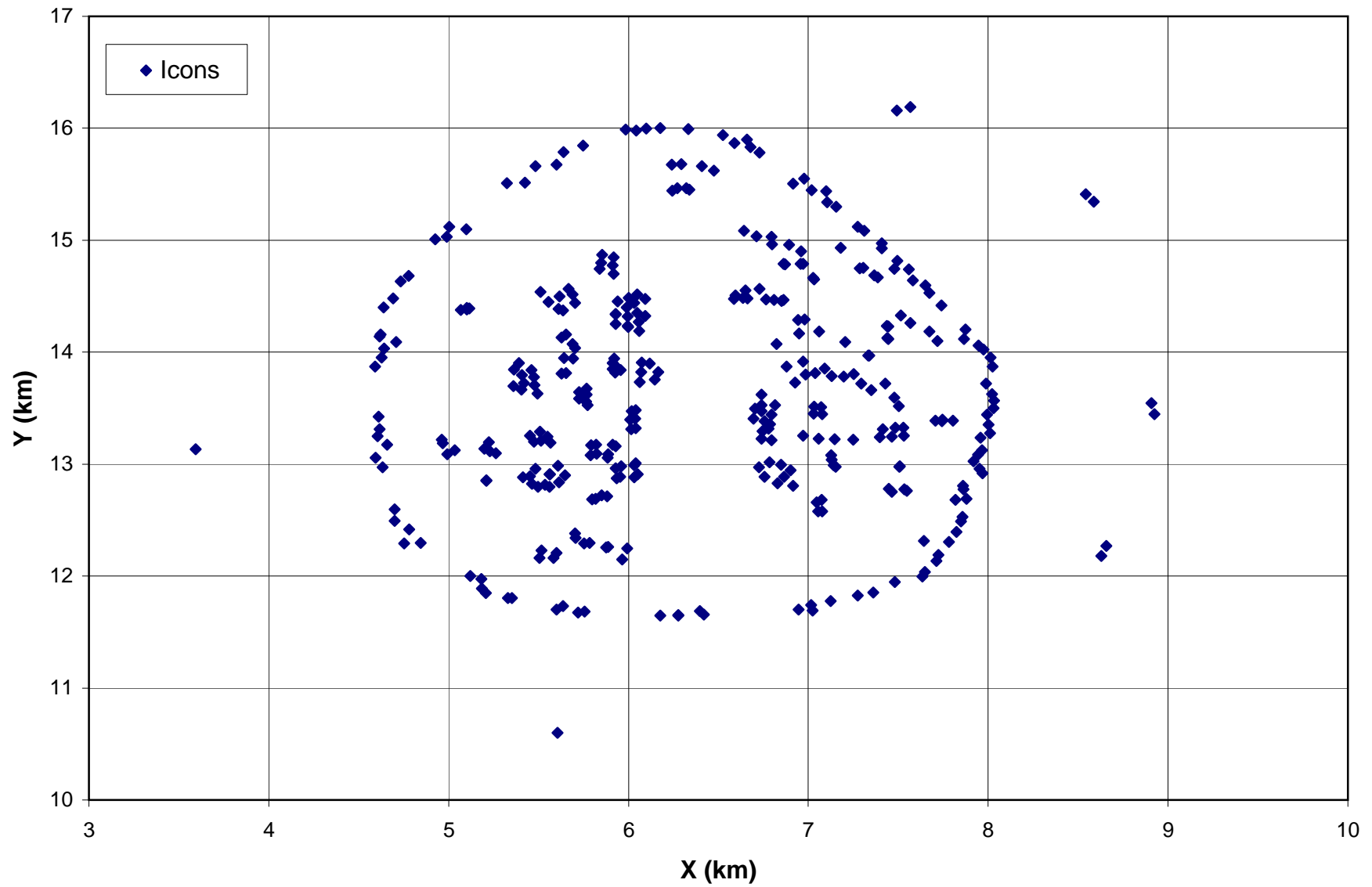


Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

Sarin (GB) 152mm Artillery
Light Attack

Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				18 rounds at aimpoint (5.90, 13.90)							
121	6.032	12.989	10	1.97E+00	0.00E+00	1.97E+00	1.97E+00	0.00E+00	8.67E-03	1.98E+00	2
122	5.929	12.964	10	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.19E-01	2.71E+01	5
124	5.934	12.874	10	8.80E+00	0.00E+00	8.80E+00	8.80E+00	0.00E+00	3.87E-02	8.84E+00	4
125	5.888	13.090	10	4.45E+01	0.00E+00	4.45E+01	4.45E+01	0.00E+00	1.96E-01	4.47E+01	6
126	5.793	13.170	10	1.69E-01	0.00E+00	1.69E-01	1.69E-01	0.00E+00	7.44E-04	1.70E-01	1
128	5.929	13.162	10	7.29E+01	0.00E+00	7.29E+01	7.29E+01	0.00E+00	3.21E-01	7.32E+01	7
129	6.018	13.474	10	2.52E+01	0.00E+00	2.52E+01	2.52E+01	0.00E+00	1.11E-01	2.53E+01	5
130	6.010	13.396	10	3.66E+01	0.00E+00	3.66E+01	3.66E+01	0.00E+00	1.61E-01	3.68E+01	6
131	6.016	13.310	10	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.06E-01	2.42E+01	5
183	5.958	13.839	8	1.31E+03	0.00E+00	1.31E+03	1.31E+03	0.00E+00	5.76E+00	1.32E+03	8
184	5.913	13.903	8	5.78E+01	0.00E+00	5.78E+01	5.78E+01	0.00E+00	2.54E-01	5.81E+01	7
185	5.912	13.851	8	1.54E+03	0.00E+00	1.54E+03	1.54E+03	0.00E+00	6.78E+00	1.55E+03	8
311	6.039	13.007	10	1.01E+00	0.00E+00	1.01E+00	1.01E+00	0.00E+00	4.44E-03	1.01E+00	2
312	5.955	12.889	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
313	5.960	12.980	10	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
314	5.884	13.058	10	3.65E+01	0.00E+00	3.65E+01	3.65E+01	0.00E+00	1.61E-01	3.67E+01	6
315	5.911	13.172	10	7.21E+01	0.00E+00	7.21E+01	7.21E+01	0.00E+00	3.17E-01	7.24E+01	7
316	5.823	13.093	10	7.07E+00	0.00E+00	7.07E+00	7.07E+00	0.00E+00	3.11E-02	7.10E+00	4
317	5.820	13.172	10	8.65E+00	0.00E+00	8.65E+00	8.65E+00	0.00E+00	3.81E-02	8.69E+00	4
318	6.039	13.482	10	4.13E+00	0.00E+00	4.13E+00	4.13E+00	0.00E+00	1.82E-02	4.15E+00	3
319	6.038	13.406	10	6.43E+00	0.00E+00	6.43E+00	6.43E+00	0.00E+00	2.83E-02	6.46E+00	4
320	6.041	13.323	10	5.97E+00	0.00E+00	5.97E+00	5.97E+00	0.00E+00	2.63E-02	6.00E+00	3
373	5.932	13.871	8	5.43E+02	0.00E+00	5.43E+02	5.43E+02	0.00E+00	2.39E+00	5.45E+02	8
374	5.920	13.941	8	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.31E-01	2.98E+01	5
375	5.927	13.817	8	5.74E+02	0.00E+00	5.74E+02	5.74E+02	0.00E+00	2.53E+00	5.77E+02	8
Case 2: Protected				18 rounds at aimpoint (5.90, 13.10)							
122	5.929	12.964	10	1.71E+00	0.00E+00	1.71E+00	3.23E+02	0.00E+00	1.42E+00	3.13E+00	3
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	6.81E-02	0.00E+00	3.00E-04	3.00E-04	1
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	3.35E+02	0.00E+00	1.47E+00	1.47E+00	2
125	5.888	13.090	10	2.26E+01	0.00E+00	2.26E+01	1.73E+02	0.00E+00	7.61E-01	2.34E+01	5
128	5.929	13.162	10	8.53E+00	0.00E+00	8.53E+00	2.48E+01	0.00E+00	1.09E-01	8.64E+00	4
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	2.73E-01	0.00E+00	1.20E-03	1.20E-03	1
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	2.85E+01	0.00E+00	1.25E-01	1.25E-01	1
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	3.38E+02	0.00E+00	1.49E+00	1.49E+00	2
352	5.960	12.980	10	3.71E+00	0.00E+00	3.71E+00	4.53E+02	0.00E+00	1.99E+00	5.70E+00	3
353	5.884	13.058	10	9.13E+00	0.00E+00	9.13E+00	2.90E+02	0.00E+00	1.28E+00	1.04E+01	4
354	5.911	13.172	10	1.05E+01	0.00E+00	1.05E+01	1.44E+01	0.00E+00	6.34E-02	1.06E+01	4
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	1.11E+02	0.00E+00	4.88E-01	4.88E-01	2

Sarin (GB) MRLS
Moderate Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				240 rounds at aimpoint (5.70, 15.20)							
1	6.093	14.476	10	5.05E+00	0.00E+00	5.05E+00	5.05E+00	0.00E+00	2.22E-02	5.07E+00	3
2	6.092	14.323	10	7.50E+00	0.00E+00	7.50E+00	7.50E+00	0.00E+00	3.30E-02	7.53E+00	4
3	6.056	14.272	10	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.64E-02	2.20E+01	5
4	5.928	14.340	10	1.21E+02	0.00E+00	1.21E+02	1.21E+02	0.00E+00	5.32E-01	1.22E+02	8
5	5.996	14.233	10	6.03E+01	0.00E+00	6.03E+01	6.03E+01	0.00E+00	2.65E-01	6.06E+01	7
6	5.940	14.453	10	1.36E+02	0.00E+00	1.36E+02	1.36E+02	0.00E+00	5.98E-01	1.37E+02	8
10	5.849	14.797	10	4.32E+02	0.00E+00	4.32E+02	4.32E+02	0.00E+00	1.90E+00	4.34E+02	8
11	5.840	14.745	10	3.34E+02	0.00E+00	3.34E+02	3.34E+02	0.00E+00	1.47E+00	3.35E+02	8
12	5.853	14.870	10	5.15E+02	0.00E+00	5.15E+02	5.15E+02	0.00E+00	2.27E+00	5.17E+02	8
40	5.550	13.245	10	2.70E+01	0.00E+00	2.70E+01	2.70E+01	0.00E+00	1.19E-01	2.71E+01	5
41	5.474	13.201	10	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
42	5.507	13.288	10	2.45E+01	0.00E+00	2.45E+01	2.45E+01	0.00E+00	1.08E-01	2.46E+01	5
67	5.560	12.798	10	5.34E+00	0.00E+00	5.34E+00	5.34E+00	0.00E+00	2.35E-02	5.36E+00	3
68	5.483	12.959	10	8.79E+00	0.00E+00	8.79E+00	8.79E+00	0.00E+00	3.87E-02	8.83E+00	4
69	5.563	12.908	10	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

70	5.463	12.826	10	3.80E+00	0.00E+00	3.80E+00	3.80E+00	0.00E+00	1.67E-02	3.82E+00	3
71	5.648	12.900	10	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
72	5.451	12.890	10	4.98E+00	0.00E+00	4.98E+00	4.98E+00	0.00E+00	2.19E-02	5.00E+00	3
97	5.610	14.388	10	1.55E+02	0.00E+00	1.55E+02	1.55E+02	0.00E+00	6.82E-01	1.56E+02	8
98	5.554	14.447	10	1.41E+02	0.00E+00	1.41E+02	1.41E+02	0.00E+00	6.20E-01	1.42E+02	8
99	5.616	14.500	10	1.88E+02	0.00E+00	1.88E+02	1.88E+02	0.00E+00	8.27E-01	1.89E+02	8
100	5.667	14.564	10	2.51E+02	0.00E+00	2.51E+02	2.51E+02	0.00E+00	1.10E+00	2.52E+02	8
101	5.392	13.905	10	2.26E+01	0.00E+00	2.26E+01	2.26E+01	0.00E+00	9.94E-02	2.27E+01	5
102	5.474	13.777	10	4.08E+01	0.00E+00	4.08E+01	4.08E+01	0.00E+00	1.80E-01	4.10E+01	6
103	5.406	13.666	10	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
104	5.461	13.842	10	4.07E+01	0.00E+00	4.07E+01	4.07E+01	0.00E+00	1.79E-01	4.09E+01	6
105	5.476	13.706	10	3.77E+01	0.00E+00	3.77E+01	3.77E+01	0.00E+00	1.66E-01	3.79E+01	6
106	5.642	13.947	10	9.05E+01	0.00E+00	9.05E+01	9.05E+01	0.00E+00	3.98E-01	9.09E+01	8
107	5.653	13.814	10	7.61E+01	0.00E+00	7.61E+01	7.61E+01	0.00E+00	3.35E-01	7.64E+01	8
108	5.627	14.130	10	1.12E+02	0.00E+00	1.12E+02	1.12E+02	0.00E+00	4.93E-01	1.12E+02	8
109	5.702	14.036	10	1.01E+02	0.00E+00	1.01E+02	1.01E+02	0.00E+00	4.44E-01	1.01E+02	8
120	6.033	14.438	10	3.95E+01	0.00E+00	3.95E+01	3.95E+01	0.00E+00	1.74E-01	3.97E+01	6
121	6.032	12.989	10	4.71E+00	0.00E+00	4.71E+00	4.71E+00	0.00E+00	2.07E-02	4.73E+00	3
122	5.929	12.964	10	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
123	6.033	12.883	10	2.53E+00	0.00E+00	2.53E+00	2.53E+00	0.00E+00	1.11E-02	2.54E+00	2
124	5.934	12.874	10	7.75E+00	0.00E+00	7.75E+00	7.75E+00	0.00E+00	3.41E-02	7.78E+00	4
125	5.888	13.090	10	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
126	5.793	13.170	10	2.54E+01	0.00E+00	2.54E+01	2.54E+01	0.00E+00	1.12E-01	2.55E+01	5
127	5.789	13.080	10	1.98E+01	0.00E+00	1.98E+01	1.98E+01	0.00E+00	8.71E-02	1.99E+01	5
128	5.929	13.162	10	2.13E+01	0.00E+00	2.13E+01	2.13E+01	0.00E+00	9.37E-02	2.14E+01	5
129	6.018	13.474	10	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
130	6.010	13.396	10	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
131	6.016	13.310	10	1.44E+01	0.00E+00	1.44E+01	1.44E+01	0.00E+00	6.34E-02	1.45E+01	4
132	6.074	13.908	10	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
133	6.062	13.731	10	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
134	6.072	13.821	10	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
159	5.817	12.688	7	2.32E+00	0.00E+00	2.32E+00	2.32E+00	0.00E+00	1.02E-02	2.33E+00	2
160	5.850	12.720	7	3.26E+00	0.00E+00	3.26E+00	3.26E+00	0.00E+00	1.43E-02	3.27E+00	3
179	5.928	14.339	8	1.20E+02	0.00E+00	1.20E+02	1.20E+02	0.00E+00	5.28E-01	1.21E+02	8
180	5.764	13.557	8	5.09E+01	0.00E+00	5.09E+01	5.09E+01	0.00E+00	2.24E-01	5.11E+01	7
181	5.766	13.622	8	5.55E+01	0.00E+00	5.55E+01	5.55E+01	0.00E+00	2.44E-01	5.57E+01	7
182	5.767	13.674	8	5.91E+01	0.00E+00	5.91E+01	5.91E+01	0.00E+00	2.60E-01	5.94E+01	7
183	5.958	13.839	8	5.04E+01	0.00E+00	5.04E+01	5.04E+01	0.00E+00	2.22E-01	5.06E+01	7
184	5.913	13.903	8	6.82E+01	0.00E+00	6.82E+01	6.82E+01	0.00E+00	3.00E-01	6.85E+01	7
185	5.912	13.851	8	6.39E+01	0.00E+00	6.39E+01	6.39E+01	0.00E+00	2.81E-01	6.42E+01	7
192	5.991	14.398	10	7.89E+01	0.00E+00	7.89E+01	7.89E+01	0.00E+00	3.47E-01	7.92E+01	8
193	6.000	14.484	10	8.01E+01	0.00E+00	8.01E+01	8.01E+01	0.00E+00	3.52E-01	8.05E+01	8
194	6.059	14.191	10	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
195	6.048	14.352	10	2.64E+01	0.00E+00	2.64E+01	2.64E+01	0.00E+00	1.16E-01	2.65E+01	5
196	5.928	14.253	10	1.06E+02	0.00E+00	1.06E+02	1.06E+02	0.00E+00	4.66E-01	1.06E+02	8
197	5.995	14.318	10	6.76E+01	0.00E+00	6.76E+01	6.76E+01	0.00E+00	2.97E-01	6.79E+01	7
201	5.917	14.848	10	6.04E+02	0.00E+00	6.04E+02	6.04E+02	0.00E+00	2.66E+00	6.07E+02	8
202	5.911	14.774	10	4.07E+02	0.00E+00	4.07E+02	4.07E+02	0.00E+00	1.79E+00	4.09E+02	8
203	5.917	14.700	10	2.70E+02	0.00E+00	2.70E+02	2.70E+02	0.00E+00	1.19E+00	2.71E+02	8
230	5.451	13.254	10	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
231	5.514	13.209	10	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5
232	5.566	13.193	10	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
256	5.413	12.882	10	3.31E+00	0.00E+00	3.31E+00	3.31E+00	0.00E+00	1.46E-02	3.32E+00	3
257	5.537	12.816	10	5.53E+00	0.00E+00	5.53E+00	5.53E+00	0.00E+00	2.43E-02	5.55E+00	3
258	5.496	12.799	10	4.09E+00	0.00E+00	4.09E+00	4.09E+00	0.00E+00	1.80E-02	4.11E+00	3
259	5.561	12.909	10	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
260	5.615	12.839	10	8.40E+00	0.00E+00	8.40E+00	8.40E+00	0.00E+00	3.70E-02	8.44E+00	4
261	5.608	12.984	10	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
286	5.702	14.442	10	1.89E+02	0.00E+00	1.89E+02	1.89E+02	0.00E+00	8.32E-01	1.90E+02	8
287	5.689	14.515	10	2.25E+02	0.00E+00	2.25E+02	2.25E+02	0.00E+00	9.90E-01	2.26E+02	8
288	5.512	14.539	10	1.35E+02	0.00E+00	1.35E+02	1.35E+02	0.00E+00	5.94E-01	1.36E+02	8
289	5.636	14.371	10	1.57E+02	0.00E+00	1.57E+02	1.57E+02	0.00E+00	6.91E-01	1.58E+02	8
290	5.419	13.723	10	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
291	5.408	13.795	10	2.40E+01	0.00E+00	2.40E+01	2.40E+01	0.00E+00	1.06E-01	2.41E+01	5
292	5.493	13.630	10	3.82E+01	0.00E+00	3.82E+01	3.82E+01	0.00E+00	1.68E-01	3.84E+01	6
293	5.361	13.699	10	1.20E+01	0.00E+00	1.20E+01	1.20E+01	0.00E+00	5.28E-02	1.21E+01	4
294	5.363	13.843	10	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
295	5.691	13.943	10	9.00E+01	0.00E+00	9.00E+01	9.00E+01	0.00E+00	3.96E-01	9.04E+01	8
296	5.690	14.073	10	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
297	5.654	14.156	10	1.20E+02	0.00E+00	1.20E+02	1.20E+02	0.00E+00	5.28E-01	1.21E+02	8
298	5.627	13.811	10	7.40E+01	0.00E+00	7.40E+01	7.40E+01	0.00E+00	3.26E-01	7.43E+01	7
309	6.048	14.515	10	2.61E+01	0.00E+00	2.61E+01	2.61E+01	0.00E+00	1.15E-01	2.62E+01	5
310	6.052	12.911	10	2.14E+00	0.00E+00	2.14E+00	2.14E+00	0.00E+00	9.42E-03	2.15E+00	2

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

311	6.039	13.007	10	4.46E+00	0.00E+00	4.46E+00	4.46E+00	0.00E+00	1.96E-02	4.48E+00	3
312	5.955	12.889	10	7.42E+00	0.00E+00	7.42E+00	7.42E+00	0.00E+00	3.26E-02	7.45E+00	4
313	5.960	12.980	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
314	5.884	13.058	10	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
315	5.911	13.172	10	2.30E+01	0.00E+00	2.30E+01	2.30E+01	0.00E+00	1.01E-01	2.31E+01	5
316	5.823	13.093	10	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
317	5.820	13.172	10	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
318	6.039	13.482	10	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
319	6.038	13.406	10	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
320	6.041	13.323	10	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
321	6.145	13.753	10	1.28E+00	0.00E+00	1.28E+00	1.28E+00	0.00E+00	5.63E-03	1.29E+00	2
322	6.165	13.823	10	3.92E-01	0.00E+00	3.92E-01	3.92E-01	0.00E+00	1.72E-03	3.94E-01	2
323	6.119	13.900	10	3.88E+00	0.00E+00	3.88E+00	3.88E+00	0.00E+00	1.71E-02	3.90E+00	3
345	5.798	12.686	7	2.35E+00	0.00E+00	2.35E+00	2.35E+00	0.00E+00	1.03E-02	2.36E+00	2
346	5.881	12.714	7	3.23E+00	0.00E+00	3.23E+00	3.23E+00	0.00E+00	1.42E-02	3.24E+00	3
348	5.264	13.099	7	1.21E-01	0.00E+00	1.21E-01	1.21E-01	0.00E+00	5.32E-04	1.22E-01	1
369	5.998	14.225	8	5.83E+01	0.00E+00	5.83E+01	5.83E+01	0.00E+00	2.57E-01	5.86E+01	7
370	5.724	13.641	8	5.87E+01	0.00E+00	5.87E+01	5.87E+01	0.00E+00	2.58E-01	5.90E+01	7
371	5.772	13.525	8	4.83E+01	0.00E+00	4.83E+01	4.83E+01	0.00E+00	2.13E-01	4.85E+01	6
372	5.724	13.585	8	5.44E+01	0.00E+00	5.44E+01	5.44E+01	0.00E+00	2.39E-01	5.46E+01	7
373	5.932	13.871	8	6.08E+01	0.00E+00	6.08E+01	6.08E+01	0.00E+00	2.68E-01	6.11E+01	7
374	5.920	13.941	8	7.07E+01	0.00E+00	7.07E+01	7.07E+01	0.00E+00	3.11E-01	7.10E+01	7
375	5.927	13.817	8	5.79E+01	0.00E+00	5.79E+01	5.79E+01	0.00E+00	2.55E-01	5.82E+01	7
Case 2: Protected 240 rounds at aipoint (5.70, 13.10)											
40	5.550	13.245	10	2.39E+02	0.00E+00	2.39E+02	6.35E+02	0.00E+00	2.79E+00	2.42E+02	8
41	5.474	13.201	10	6.16E+00	0.00E+00	6.16E+00	3.86E+02	0.00E+00	1.70E+00	7.86E+00	4
42	5.507	13.288	10	8.56E-01	0.00E+00	8.56E-01	2.83E+01	0.00E+00	1.25E-01	9.81E-01	2
67	5.560	12.798	10	2.54E+02	0.00E+00	2.54E+02	1.04E+03	0.00E+00	4.58E+00	2.59E+02	8
68	5.483	12.959	10	7.53E+01	0.00E+00	7.53E+01	3.47E+02	0.00E+00	1.53E+00	7.68E+01	8
69	5.563	12.908	10	1.81E+02	0.00E+00	1.81E+02	7.66E+02	0.00E+00	3.37E+00	1.84E+02	8
70	5.463	12.826	10	2.26E+01	0.00E+00	2.26E+01	4.28E+02	0.00E+00	1.88E+00	2.45E+01	5
71	5.648	12.900	10	5.42E-01	0.00E+00	5.42E-01	4.31E+02	0.00E+00	1.90E+00	2.44E+00	2
72	5.451	12.890	10	1.39E+01	0.00E+00	1.39E+01	1.92E+02	0.00E+00	8.45E-01	1.47E+01	4
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	1.44E+02	0.00E+00	6.34E-01	6.34E-01	2
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	6.50E+01	0.00E+00	2.86E-01	2.86E-01	2
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	6.78E+01	0.00E+00	2.98E-01	2.98E-01	2
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	1.63E+01	0.00E+00	7.17E-02	7.17E-02	1
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	1.42E+02	0.00E+00	6.25E-01	6.25E-01	2
122	5.929	12.964	10	2.41E+02	0.00E+00	2.41E+02	9.88E+02	0.00E+00	4.35E+00	2.45E+02	8
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	7.27E+01	0.00E+00	3.20E-01	3.20E-01	2
124	5.934	12.874	10	9.91E+01	0.00E+00	9.91E+01	6.43E+02	0.00E+00	2.83E+00	1.02E+02	8
125	5.888	13.090	10	2.12E+02	0.00E+00	2.12E+02	7.14E+02	0.00E+00	3.14E+00	2.15E+02	8
126	5.793	13.170	10	3.47E+01	0.00E+00	3.47E+01	4.35E+02	0.00E+00	1.91E+00	3.66E+01	6
127	5.789	13.080	10	5.44E+01	0.00E+00	5.44E+01	6.36E+02	0.00E+00	2.80E+00	5.72E+01	7
128	5.929	13.162	10	9.50E+01	0.00E+00	9.50E+01	6.81E+02	0.00E+00	3.00E+00	9.80E+01	8
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	3.02E+02	0.00E+00	1.33E+00	1.33E+00	2
191	5.850	12.720	7	1.60E+01	0.00E+00	1.60E+01	4.20E+02	0.00E+00	1.85E+00	1.78E+01	5
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	2.26E+01	0.00E+00	9.94E-02	9.94E-02	1
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	3.63E+01	0.00E+00	1.60E-01	1.60E-01	1
269	5.451	13.254	10	4.47E+00	0.00E+00	4.47E+00	1.31E+02	0.00E+00	5.76E-01	5.05E+00	3
270	5.514	13.209	10	5.50E+00	0.00E+00	5.50E+00	2.49E+02	0.00E+00	1.10E+00	6.60E+00	4
271	5.566	13.193	10	1.03E+02	0.00E+00	1.03E+02	6.91E+02	0.00E+00	3.04E+00	1.06E+02	8
295	5.413	12.882	10	5.29E+01	0.00E+00	5.29E+01	2.82E+02	0.00E+00	1.24E+00	5.41E+01	7
296	5.537	12.816	10	2.68E+01	0.00E+00	2.68E+01	5.77E+02	0.00E+00	2.54E+00	2.93E+01	5
297	5.496	12.799	10	5.31E+00	0.00E+00	5.31E+00	4.03E+02	0.00E+00	1.77E+00	7.08E+00	4
298	5.561	12.909	10	2.14E+02	0.00E+00	2.14E+02	8.42E+02	0.00E+00	3.70E+00	2.18E+02	8
299	5.615	12.839	10	2.86E+01	0.00E+00	2.86E+01	5.17E+02	0.00E+00	2.27E+00	3.09E+01	6
300	5.608	12.984	10	3.52E+01	0.00E+00	3.52E+01	4.99E+02	0.00E+00	2.20E+00	3.74E+01	6
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	6.81E+01	0.00E+00	3.00E-01	3.00E-01	2
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	2.75E+01	0.00E+00	1.21E-01	1.21E-01	1
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	7.27E+01	0.00E+00	3.20E-01	3.20E-01	2
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	1.22E+02	0.00E+00	5.37E-01	5.37E-01	2
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	1.93E+00	0.00E+00	8.49E-03	8.49E-03	1
350	6.039	13.007	10	4.93E+00	0.00E+00	4.93E+00	9.33E+01	0.00E+00	4.11E-01	5.34E+00	3
351	5.955	12.889	10	6.13E+01	0.00E+00	6.13E+01	4.90E+02	0.00E+00	2.16E+00	6.35E+01	7
352	5.960	12.980	10	2.51E+02	0.00E+00	2.51E+02	6.40E+02	0.00E+00	2.82E+00	2.54E+02	8
353	5.884	13.058	10	1.94E+02	0.00E+00	1.94E+02	7.64E+02	0.00E+00	3.36E+00	1.97E+02	8
354	5.911	13.172	10	9.97E+01	0.00E+00	9.97E+01	4.94E+02	0.00E+00	2.17E+00	1.02E+02	8
355	5.823	13.093	10	9.07E+00	0.00E+00	9.07E+00	1.31E+02	0.00E+00	5.76E-01	9.65E+00	4
356	5.820	13.172	10	9.26E+00	0.00E+00	9.26E+00	1.58E+02	0.00E+00	6.95E-01	9.96E+00	4
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	2.97E+02	0.00E+00	1.31E+00	1.31E+00	2
417	5.881	12.714	7	2.65E+01	0.00E+00	2.65E+01	4.86E+02	0.00E+00	2.14E+00	2.86E+01	5
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	5.15E+01	0.00E+00	2.27E-01	2.27E-01	1

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	3.77E+01	0.00E+00	1.66E-01	1.66E-01	1
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Sarin (GB) MRLS
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				720 rounds at aimpoint (5.50, 16.20)							
1	6.093	14.476	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
2	6.092	14.323	10	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
3	6.056	14.272	10	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
4	5.928	14.340	10	3.67E+01	0.00E+00	3.67E+01	3.67E+01	0.00E+00	1.61E-01	3.69E+01	6
5	5.996	14.233	10	2.29E+01	0.00E+00	2.29E+01	2.29E+01	0.00E+00	1.01E-01	2.30E+01	5
6	5.940	14.453	10	3.89E+01	0.00E+00	3.89E+01	3.89E+01	0.00E+00	1.71E-01	3.91E+01	6
10	5.849	14.797	10	7.17E+01	0.00E+00	7.17E+01	7.17E+01	0.00E+00	3.15E-01	7.20E+01	7
11	5.840	14.745	10	6.90E+01	0.00E+00	6.90E+01	6.90E+01	0.00E+00	3.04E-01	6.93E+01	7
12	5.853	14.870	10	7.74E+01	0.00E+00	7.74E+01	7.74E+01	0.00E+00	3.41E-01	7.77E+01	8
35	5.984	15.987	10	3.43E+02	0.00E+00	3.43E+02	3.43E+02	0.00E+00	1.51E+00	3.45E+02	8
36	6.098	15.997	10	7.91E+00	0.00E+00	7.91E+00	7.91E+00	0.00E+00	3.48E-02	7.94E+00	4
40	5.550	13.245	10	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
41	5.474	13.201	10	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
42	5.507	13.288	10	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5
67	5.560	12.798	10	4.82E+00	0.00E+00	4.82E+00	4.82E+00	0.00E+00	2.12E-02	4.84E+00	3
68	5.483	12.959	10	7.67E+00	0.00E+00	7.67E+00	7.67E+00	0.00E+00	3.37E-02	7.70E+00	4
69	5.563	12.908	10	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.05E-02	6.96E+00	4
70	5.463	12.826	10	5.06E+00	0.00E+00	5.06E+00	5.06E+00	0.00E+00	2.23E-02	5.08E+00	3
71	5.648	12.900	10	6.05E+00	0.00E+00	6.05E+00	6.05E+00	0.00E+00	2.66E-02	6.08E+00	4
72	5.451	12.890	10	6.21E+00	0.00E+00	6.21E+00	6.21E+00	0.00E+00	2.73E-02	6.24E+00	4
91	4.734	14.632	10	1.12E-01	0.00E+00	1.12E-01	1.12E-01	0.00E+00	4.93E-04	1.12E-01	1
92	4.925	15.009	10	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.18E-02	1.87E+01	5
93	5.004	15.122	10	5.19E+01	0.00E+00	5.19E+01	5.19E+01	0.00E+00	2.28E-01	5.21E+01	7
94	5.423	15.512	10	4.03E+02	0.00E+00	4.03E+02	4.03E+02	0.00E+00	1.77E+00	4.05E+02	8
95	5.601	15.674	10	5.28E+02	0.00E+00	5.28E+02	5.28E+02	0.00E+00	2.32E+00	5.30E+02	8
96	5.747	15.847	10	3.15E+02	0.00E+00	3.15E+02	3.15E+02	0.00E+00	1.39E+00	3.16E+02	8
97	5.610	14.388	10	6.12E+01	0.00E+00	6.12E+01	6.12E+01	0.00E+00	2.69E-01	6.15E+01	7
98	5.554	14.447	10	6.72E+01	0.00E+00	6.72E+01	6.72E+01	0.00E+00	2.96E-01	6.75E+01	7
99	5.616	14.500	10	6.74E+01	0.00E+00	6.74E+01	6.74E+01	0.00E+00	2.97E-01	6.77E+01	7
100	5.667	14.564	10	6.76E+01	0.00E+00	6.76E+01	6.76E+01	0.00E+00	2.97E-01	6.79E+01	7
101	5.392	13.905	10	3.86E+01	0.00E+00	3.86E+01	3.86E+01	0.00E+00	1.70E-01	3.88E+01	6
102	5.474	13.777	10	3.43E+01	0.00E+00	3.43E+01	3.43E+01	0.00E+00	1.51E-01	3.45E+01	6
103	5.406	13.666	10	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
104	5.461	13.842	10	3.68E+01	0.00E+00	3.68E+01	3.68E+01	0.00E+00	1.62E-01	3.70E+01	6
105	5.476	13.706	10	3.15E+01	0.00E+00	3.15E+01	3.15E+01	0.00E+00	1.39E-01	3.16E+01	6
106	5.642	13.947	10	3.93E+01	0.00E+00	3.93E+01	3.93E+01	0.00E+00	1.73E-01	3.95E+01	6
107	5.653	13.814	10	3.36E+01	0.00E+00	3.36E+01	3.36E+01	0.00E+00	1.48E-01	3.37E+01	6
108	5.627	14.130	10	4.79E+01	0.00E+00	4.79E+01	4.79E+01	0.00E+00	2.11E-01	4.81E+01	6
109	5.702	14.036	10	4.13E+01	0.00E+00	4.13E+01	4.13E+01	0.00E+00	1.82E-01	4.15E+01	6
110	5.702	12.379	10	2.23E-01	0.00E+00	2.23E-01	2.23E-01	0.00E+00	9.81E-04	2.24E-01	1
111	5.784	12.296	10	1.03E-01	0.00E+00	1.03E-01	1.03E-01	0.00E+00	4.53E-04	1.03E-01	1
112	5.875	12.255	10	6.67E-03	0.00E+00	6.67E-03	6.67E-03	0.00E+00	2.93E-05	6.70E-03	1
120	6.033	14.438	10	2.07E+01	0.00E+00	2.07E+01	2.07E+01	0.00E+00	9.11E-02	2.08E+01	5
121	6.032	12.989	10	2.31E+00	0.00E+00	2.31E+00	2.31E+00	0.00E+00	1.02E-02	2.32E+00	2
122	5.929	12.964	10	4.51E+00	0.00E+00	4.51E+00	4.51E+00	0.00E+00	1.98E-02	4.53E+00	3
123	6.033	12.883	10	1.44E+00	0.00E+00	1.44E+00	1.44E+00	0.00E+00	6.34E-03	1.45E+00	2
124	5.934	12.874	10	3.22E+00	0.00E+00	3.22E+00	3.22E+00	0.00E+00	1.42E-02	3.23E+00	3
125	5.888	13.090	10	7.63E+00	0.00E+00	7.63E+00	7.63E+00	0.00E+00	3.36E-02	7.66E+00	4
126	5.793	13.170	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
127	5.789	13.080	10	8.60E+00	0.00E+00	8.60E+00	8.60E+00	0.00E+00	3.78E-02	8.64E+00	4
128	5.929	13.162	10	7.95E+00	0.00E+00	7.95E+00	7.95E+00	0.00E+00	3.50E-02	7.98E+00	4
129	6.018	13.474	10	8.41E+00	0.00E+00	8.41E+00	8.41E+00	0.00E+00	3.70E-02	8.45E+00	4
130	6.010	13.396	10	7.93E+00	0.00E+00	7.93E+00	7.93E+00	0.00E+00	3.49E-02	7.96E+00	4
131	6.016	13.310	10	6.54E+00	0.00E+00	6.54E+00	6.54E+00	0.00E+00	2.88E-02	6.57E+00	4
132	6.074	13.908	10	8.78E+00	0.00E+00	8.78E+00	8.78E+00	0.00E+00	3.86E-02	8.82E+00	4
133	6.062	13.731	10	8.10E+00	0.00E+00	8.10E+00	8.10E+00	0.00E+00	3.56E-02	8.14E+00	4
134	6.072	13.821	10	8.15E+00	0.00E+00	8.15E+00	8.15E+00	0.00E+00	3.59E-02	8.19E+00	4
158	5.211	12.855	7	4.26E+00	0.00E+00	4.26E+00	4.26E+00	0.00E+00	1.87E-02	4.28E+00	3
159	5.817	12.688	7	1.99E+00	0.00E+00	1.99E+00	1.99E+00	0.00E+00	8.76E-03	2.00E+00	2
160	5.850	12.720	7	2.28E+00	0.00E+00	2.28E+00	2.28E+00	0.00E+00	1.00E-02	2.29E+00	2
161	5.199	13.137	7	9.93E+00	0.00E+00	9.93E+00	9.93E+00	0.00E+00	4.37E-02	9.97E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

162	5.224	13.195	7	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
165	4.968	13.187	7	4.14E+00	0.00E+00	4.14E+00	4.14E+00	0.00E+00	1.82E-02	4.16E+00	3
166	5.033	13.123	7	5.50E+00	0.00E+00	5.50E+00	5.50E+00	0.00E+00	2.42E-02	5.52E+00	3
167	5.102	14.383	7	4.07E+01	0.00E+00	4.07E+01	4.07E+01	0.00E+00	1.79E-01	4.09E+01	6
168	5.115	14.389	7	4.26E+01	0.00E+00	4.26E+01	4.26E+01	0.00E+00	1.87E-01	4.28E+01	6
179	5.928	14.339	8	3.67E+01	0.00E+00	3.67E+01	3.67E+01	0.00E+00	1.61E-01	3.69E+01	6
180	5.764	13.557	8	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.86E-02	2.25E+01	5
181	5.766	13.622	8	2.44E+01	0.00E+00	2.44E+01	2.44E+01	0.00E+00	1.07E-01	2.45E+01	5
182	5.767	13.674	8	2.60E+01	0.00E+00	2.60E+01	2.60E+01	0.00E+00	1.14E-01	2.61E+01	5
183	5.958	13.839	8	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.54E-02	1.95E+01	5
184	5.913	13.903	8	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
185	5.912	13.851	8	2.38E+01	0.00E+00	2.38E+01	2.38E+01	0.00E+00	1.05E-01	2.39E+01	5
192	5.991	14.398	10	2.76E+01	0.00E+00	2.76E+01	2.76E+01	0.00E+00	1.21E-01	2.77E+01	5
193	6.000	14.484	10	2.78E+01	0.00E+00	2.78E+01	2.78E+01	0.00E+00	1.22E-01	2.79E+01	5
194	6.059	14.191	10	1.31E+01	0.00E+00	1.31E+01	1.31E+01	0.00E+00	5.76E-02	1.32E+01	4
195	6.048	14.352	10	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.39E-02	1.69E+01	5
196	5.928	14.253	10	3.37E+01	0.00E+00	3.37E+01	3.37E+01	0.00E+00	1.48E-01	3.38E+01	6
197	5.995	14.318	10	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
201	5.917	14.848	10	6.24E+01	0.00E+00	6.24E+01	6.24E+01	0.00E+00	2.75E-01	6.27E+01	7
202	5.911	14.774	10	5.90E+01	0.00E+00	5.90E+01	5.90E+01	0.00E+00	2.60E-01	5.93E+01	7
203	5.917	14.700	10	5.38E+01	0.00E+00	5.38E+01	5.38E+01	0.00E+00	2.37E-01	5.40E+01	7
225	6.044	15.980	10	1.97E+02	0.00E+00	1.97E+02	1.97E+02	0.00E+00	8.67E-01	1.98E+02	8
230	5.451	13.254	10	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.69E-02	1.53E+01	5
231	5.514	13.209	10	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
232	5.566	13.193	10	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
256	5.413	12.882	10	5.89E+00	0.00E+00	5.89E+00	5.89E+00	0.00E+00	2.59E-02	5.92E+00	3
257	5.537	12.816	10	5.18E+00	0.00E+00	5.18E+00	5.18E+00	0.00E+00	2.28E-02	5.20E+00	3
258	5.496	12.799	10	4.73E+00	0.00E+00	4.73E+00	4.73E+00	0.00E+00	2.08E-02	4.75E+00	3
259	5.561	12.909	10	6.96E+00	0.00E+00	6.96E+00	6.96E+00	0.00E+00	3.06E-02	6.99E+00	4
260	5.615	12.839	10	5.21E+00	0.00E+00	5.21E+00	5.21E+00	0.00E+00	2.29E-02	5.23E+00	3
261	5.608	12.984	10	8.17E+00	0.00E+00	8.17E+00	8.17E+00	0.00E+00	3.59E-02	8.21E+00	4
278	4.708	14.090	10	3.94E-02	0.00E+00	3.94E-02	3.94E-02	0.00E+00	1.73E-04	3.96E-02	1
280	4.779	14.681	10	8.73E-01	0.00E+00	8.73E-01	8.73E-01	0.00E+00	3.84E-03	8.77E-01	2
281	4.990	15.031	10	4.09E+01	0.00E+00	4.09E+01	4.09E+01	0.00E+00	1.80E-01	4.11E+01	6
282	5.097	15.098	10	7.88E+01	0.00E+00	7.88E+01	7.88E+01	0.00E+00	3.47E-01	7.91E+01	8
283	5.324	15.511	10	3.53E+02	0.00E+00	3.53E+02	3.53E+02	0.00E+00	1.55E+00	3.55E+02	8
284	5.639	15.789	10	6.05E+02	0.00E+00	6.05E+02	6.05E+02	0.00E+00	2.66E+00	6.08E+02	8
285	5.484	15.661	10	4.66E+02	0.00E+00	4.66E+02	4.66E+02	0.00E+00	2.05E+00	4.68E+02	8
286	5.702	14.442	10	5.94E+01	0.00E+00	5.94E+01	5.94E+01	0.00E+00	2.61E-01	5.97E+01	7
287	5.689	14.515	10	6.38E+01	0.00E+00	6.38E+01	6.38E+01	0.00E+00	2.81E-01	6.41E+01	7
288	5.512	14.539	10	7.37E+01	0.00E+00	7.37E+01	7.37E+01	0.00E+00	3.24E-01	7.40E+01	7
289	5.636	14.371	10	5.90E+01	0.00E+00	5.90E+01	5.90E+01	0.00E+00	2.60E-01	5.93E+01	7
290	5.419	13.723	10	3.17E+01	0.00E+00	3.17E+01	3.17E+01	0.00E+00	1.39E-01	3.18E+01	6
291	5.408	13.795	10	3.42E+01	0.00E+00	3.42E+01	3.42E+01	0.00E+00	1.50E-01	3.44E+01	6
292	5.493	13.630	10	2.88E+01	0.00E+00	2.88E+01	2.88E+01	0.00E+00	1.27E-01	2.89E+01	5
293	5.361	13.699	10	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.32E-01	3.00E+01	6
294	5.363	13.843	10	3.54E+01	0.00E+00	3.54E+01	3.54E+01	0.00E+00	1.56E-01	3.56E+01	6
295	5.691	13.943	10	3.79E+01	0.00E+00	3.79E+01	3.79E+01	0.00E+00	1.67E-01	3.81E+01	6
296	5.690	14.073	10	4.33E+01	0.00E+00	4.33E+01	4.33E+01	0.00E+00	1.91E-01	4.35E+01	6
297	5.654	14.156	10	4.82E+01	0.00E+00	4.82E+01	4.82E+01	0.00E+00	2.12E-01	4.84E+01	6
298	5.627	13.811	10	3.40E+01	0.00E+00	3.40E+01	3.40E+01	0.00E+00	1.50E-01	3.41E+01	6
299	5.888	12.262	10	5.54E-03	0.00E+00	5.54E-03	5.54E-03	0.00E+00	2.44E-05	5.56E-03	1
301	5.752	12.293	10	1.30E-01	0.00E+00	1.30E-01	1.30E-01	0.00E+00	5.72E-04	1.31E-01	1
302	5.706	12.340	10	1.77E-01	0.00E+00	1.77E-01	1.77E-01	0.00E+00	7.79E-04	1.78E-01	1
309	6.048	14.515	10	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
310	6.052	12.911	10	1.24E+00	0.00E+00	1.24E+00	1.24E+00	0.00E+00	5.46E-03	1.25E+00	2
311	6.039	13.007	10	2.24E+00	0.00E+00	2.24E+00	2.24E+00	0.00E+00	9.86E-03	2.25E+00	2
312	5.955	12.889	10	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.35E-02	3.07E+00	3
313	5.960	12.980	10	4.10E+00	0.00E+00	4.10E+00	4.10E+00	0.00E+00	1.80E-02	4.12E+00	3
314	5.884	13.058	10	7.04E+00	0.00E+00	7.04E+00	7.04E+00	0.00E+00	3.10E-02	7.07E+00	4
315	5.911	13.172	10	8.71E+00	0.00E+00	8.71E+00	8.71E+00	0.00E+00	3.83E-02	8.75E+00	4
316	5.823	13.093	10	8.63E+00	0.00E+00	8.63E+00	8.63E+00	0.00E+00	3.80E-02	8.67E+00	4
317	5.820	13.172	10	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
318	6.039	13.482	10	7.18E+00	0.00E+00	7.18E+00	7.18E+00	0.00E+00	3.16E-02	7.21E+00	4
319	6.038	13.406	10	6.45E+00	0.00E+00	6.45E+00	6.45E+00	0.00E+00	2.84E-02	6.48E+00	4
320	6.041	13.323	10	5.42E+00	0.00E+00	5.42E+00	5.42E+00	0.00E+00	2.38E-02	5.44E+00	3
321	6.145	13.753	10	3.06E+00	0.00E+00	3.06E+00	3.06E+00	0.00E+00	1.35E-02	3.07E+00	3
322	6.165	13.823	10	2.47E+00	0.00E+00	2.47E+00	2.47E+00	0.00E+00	1.09E-02	2.48E+00	2
323	6.119	13.900	10	5.18E+00	0.00E+00	5.18E+00	5.18E+00	0.00E+00	2.28E-02	5.20E+00	3
334	6.245	15.441	7	1.37E-03	0.00E+00	1.37E-03	1.37E-03	0.00E+00	6.03E-06	1.38E-03	1
345	5.798	12.686	7	2.00E+00	0.00E+00	2.00E+00	2.00E+00	0.00E+00	8.80E-03	2.01E+00	2
346	5.881	12.714	7	1.98E+00	0.00E+00	1.98E+00	1.98E+00	0.00E+00	8.71E-03	1.99E+00	2
347	5.228	13.115	7	9.73E+00	0.00E+00	9.73E+00	9.73E+00	0.00E+00	4.28E-02	9.77E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

348	5.264	13.099	7	9.71E+00	0.00E+00	9.71E+00	9.71E+00	0.00E+00	4.27E-02	9.75E+00	4
349	5.601	12.207	7	1.12E-02	0.00E+00	1.12E-02	1.12E-02	0.00E+00	4.93E-05	1.12E-02	1
350	5.517	12.227	7	6.37E-02	0.00E+00	6.37E-02	6.37E-02	0.00E+00	2.80E-04	6.40E-02	1
351	4.992	13.086	7	3.81E+00	0.00E+00	3.81E+00	3.81E+00	0.00E+00	1.68E-02	3.83E+00	3
352	4.962	13.219	7	4.23E+00	0.00E+00	4.23E+00	4.23E+00	0.00E+00	1.86E-02	4.25E+00	3
353	5.069	14.379	7	3.54E+01	0.00E+00	3.54E+01	3.54E+01	0.00E+00	1.56E-01	3.56E+01	6
354	5.100	14.393	7	4.08E+01	0.00E+00	4.08E+01	4.08E+01	0.00E+00	1.80E-01	4.10E+01	6
366	5.211	12.851	8	4.19E+00	0.00E+00	4.19E+00	4.19E+00	0.00E+00	1.84E-02	4.21E+00	3
369	5.998	14.225	8	2.24E+01	0.00E+00	2.24E+01	2.24E+01	0.00E+00	9.86E-02	2.25E+01	5
370	5.724	13.641	8	2.61E+01	0.00E+00	2.61E+01	2.61E+01	0.00E+00	1.15E-01	2.62E+01	5
371	5.772	13.525	8	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.33E-02	2.13E+01	5
372	5.724	13.585	8	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
373	5.932	13.871	8	2.25E+01	0.00E+00	2.25E+01	2.25E+01	0.00E+00	9.90E-02	2.26E+01	5
374	5.920	13.941	8	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
375	5.927	13.817	8	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5
Case 2: Protected 720 rounds at aimpoint (5.70, 14.40)											
1	6.093	14.476	10	2.98E+02	0.00E+00	2.98E+02	4.86E+02	0.00E+00	2.14E+00	3.00E+02	8
2	6.092	14.323	10	2.88E+02	0.00E+00	2.88E+02	6.54E+02	0.00E+00	2.88E+00	2.91E+02	8
3	6.056	14.272	10	2.54E+02	0.00E+00	2.54E+02	6.84E+02	0.00E+00	3.01E+00	2.57E+02	8
4	5.928	14.340	10	1.59E+02	0.00E+00	1.59E+02	4.20E+02	0.00E+00	1.85E+00	1.61E+02	8
5	5.996	14.233	10	2.22E+02	0.00E+00	2.22E+02	5.85E+02	0.00E+00	2.57E+00	2.25E+02	8
6	5.940	14.453	10	2.26E+02	0.00E+00	2.26E+02	3.97E+02	0.00E+00	1.75E+00	2.28E+02	8
10	5.849	14.797	10	9.98E+00	0.00E+00	9.98E+00	2.11E+02	0.00E+00	9.28E-01	1.09E+01	4
11	5.840	14.745	10	1.00E+02	0.00E+00	1.00E+02	3.27E+02	0.00E+00	1.44E+00	1.01E+02	8
12	5.853	14.870	10	9.96E+00	0.00E+00	9.96E+00	1.33E+02	0.00E+00	5.85E-01	1.05E+01	4
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	7.62E+01	0.00E+00	3.35E-01	3.35E-01	2
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	6.93E+01	0.00E+00	3.05E-01	3.05E-01	2
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	8.79E+01	0.00E+00	3.87E-01	3.87E-01	2
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	1.91E+01	0.00E+00	8.40E-02	8.40E-02	1
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	3.47E+01	0.00E+00	1.53E-01	1.53E-01	1
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	3.05E+01	0.00E+00	1.34E-01	1.34E-01	1
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	1.93E+01	0.00E+00	8.49E-02	8.49E-02	1
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	3.42E+01	0.00E+00	1.50E-01	1.50E-01	1
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	2.60E+01	0.00E+00	1.14E-01	1.14E-01	1
97	5.610	14.388	10	2.80E+01	0.00E+00	2.80E+01	4.07E+02	0.00E+00	1.79E+00	2.98E+01	5
98	5.554	14.447	10	8.42E+01	0.00E+00	8.42E+01	3.09E+02	0.00E+00	1.36E+00	8.56E+01	8
99	5.616	14.500	10	2.81E+01	0.00E+00	2.81E+01	3.54E+02	0.00E+00	1.56E+00	2.97E+01	5
100	5.667	14.564	10	5.50E+01	0.00E+00	5.50E+01	2.57E+02	0.00E+00	1.13E+00	5.61E+01	7
101	5.392	13.905	10	1.03E+01	0.00E+00	1.03E+01	2.71E+02	0.00E+00	1.19E+00	1.15E+01	4
102	5.474	13.777	10	4.55E-01	0.00E+00	4.55E-01	3.31E+02	0.00E+00	1.46E+00	1.91E+00	2
103	5.406	13.666	10	0.00E+00	0.00E+00	0.00E+00	1.91E+02	0.00E+00	8.40E-01	8.40E-01	2
104	5.461	13.842	10	2.55E+01	0.00E+00	2.55E+01	3.96E+02	0.00E+00	1.74E+00	2.72E+01	5
105	5.476	13.706	10	2.95E-01	0.00E+00	2.95E-01	2.68E+02	0.00E+00	1.18E+00	1.47E+00	2
106	5.642	13.947	10	7.92E+01	0.00E+00	7.92E+01	5.30E+02	0.00E+00	2.33E+00	8.15E+01	8
107	5.653	13.814	10	4.36E+01	0.00E+00	4.36E+01	5.04E+02	0.00E+00	2.22E+00	4.58E+01	6
108	5.627	14.130	10	9.97E+01	0.00E+00	9.97E+01	3.68E+02	0.00E+00	1.62E+00	1.01E+02	8
109	5.702	14.036	10	1.65E+02	0.00E+00	1.65E+02	6.16E+02	0.00E+00	2.71E+00	1.68E+02	8
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	5.66E-01	0.00E+00	2.49E-03	2.49E-03	1
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	2.00E-01	0.00E+00	8.80E-04	8.80E-04	1
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	6.47E-02	0.00E+00	2.85E-04	2.85E-04	1
120	6.033	14.438	10	1.43E+02	0.00E+00	1.43E+02	3.83E+02	0.00E+00	1.69E+00	1.45E+02	8
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	3.29E+01	0.00E+00	1.45E-01	1.45E-01	1
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	3.28E+01	0.00E+00	1.44E-01	1.44E-01	1
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	2.19E+01	0.00E+00	9.64E-02	9.64E-02	1
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	2.40E+01	0.00E+00	1.06E-01	1.06E-01	1
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	4.98E+01	0.00E+00	2.19E-01	2.19E-01	1
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	7.14E+01	0.00E+00	3.14E-01	3.14E-01	2
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	5.80E+01	0.00E+00	2.55E-01	2.55E-01	2
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	5.73E+01	0.00E+00	2.52E-01	2.52E-01	2
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	1.21E+02	0.00E+00	5.32E-01	5.32E-01	2
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	9.93E+01	0.00E+00	4.37E-01	4.37E-01	2
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	8.29E+01	0.00E+00	3.65E-01	3.65E-01	2
132	6.074	13.908	10	7.08E+01	0.00E+00	7.08E+01	4.00E+02	0.00E+00	1.76E+00	7.26E+01	7
133	6.062	13.731	10	2.11E-03	0.00E+00	2.11E-03	2.43E+02	0.00E+00	1.07E+00	1.07E+00	2
134	6.072	13.821	10	1.40E+01	0.00E+00	1.40E+01	3.02E+02	0.00E+00	1.33E+00	1.53E+01	5
189	5.211	12.855	7	0.00E+00	0.00E+00	0.00E+00	6.88E+00	0.00E+00	3.03E-02	3.03E-02	1
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	1.22E+01	0.00E+00	5.37E-02	5.37E-02	1
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	1.35E+01	0.00E+00	5.94E-02	5.94E-02	1
192	5.199	13.137	7	0.00E+00	0.00E+00	0.00E+00	2.30E+01	0.00E+00	1.01E-01	1.01E-01	1
193	5.224	13.195	7	0.00E+00	0.00E+00	0.00E+00	3.25E+01	0.00E+00	1.43E-01	1.43E-01	1
196	4.968	13.187	7	0.00E+00	0.00E+00	0.00E+00	1.61E-01	0.00E+00	7.08E-04	7.08E-04	1
197	5.033	13.123	7	0.00E+00	0.00E+00	0.00E+00	1.21E+00	0.00E+00	5.32E-03	5.32E-03	1
198	5.102	14.383	7	6.94E+00	0.00E+00	6.94E+00	1.10E+01	0.00E+00	4.84E-02	6.99E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

199	5.115	14.389	7	5.36E+01	0.00E+00	5.36E+01	8.29E+01	0.00E+00	3.65E-01	5.40E+01	7
210	5.928	14.339	8	1.59E+02	0.00E+00	1.59E+02	4.21E+02	0.00E+00	1.85E+00	1.61E+02	8
211	5.764	13.557	8	0.00E+00	0.00E+00	0.00E+00	1.88E+02	0.00E+00	8.27E-01	8.27E-01	2
212	5.766	13.622	8	2.80E+00	0.00E+00	2.80E+00	2.20E+02	0.00E+00	9.68E-01	3.77E+00	3
213	5.767	13.674	8	9.13E+00	0.00E+00	9.13E+00	2.57E+02	0.00E+00	1.13E+00	1.03E+01	4
214	5.958	13.839	8	1.31E+01	0.00E+00	1.31E+01	2.15E+02	0.00E+00	9.46E-01	1.40E+01	4
215	5.913	13.903	8	6.35E+00	0.00E+00	6.35E+00	2.69E+02	0.00E+00	1.18E+00	7.53E+00	4
216	5.912	13.851	8	8.31E+00	0.00E+00	8.31E+00	2.54E+02	0.00E+00	1.12E+00	9.43E+00	4
231	5.991	14.398	10	1.92E+02	0.00E+00	1.92E+02	4.98E+02	0.00E+00	2.19E+00	1.94E+02	8
232	6.000	14.484	10	2.38E+02	0.00E+00	2.38E+02	5.06E+02	0.00E+00	2.23E+00	2.40E+02	8
233	6.059	14.191	10	3.05E+02	0.00E+00	3.05E+02	8.37E+02	0.00E+00	3.68E+00	3.09E+02	8
234	6.048	14.352	10	1.57E+02	0.00E+00	1.57E+02	4.72E+02	0.00E+00	2.08E+00	1.59E+02	8
235	5.928	14.253	10	1.34E+02	0.00E+00	1.34E+02	4.64E+02	0.00E+00	2.04E+00	1.36E+02	8
236	5.995	14.318	10	2.00E+02	0.00E+00	2.00E+02	5.39E+02	0.00E+00	2.37E+00	2.02E+02	8
240	5.917	14.848	10	1.01E+02	0.00E+00	1.01E+02	1.50E+02	0.00E+00	6.60E-01	1.02E+02	8
241	5.911	14.774	10	1.42E+02	0.00E+00	1.42E+02	1.91E+02	0.00E+00	8.40E-01	1.43E+02	8
242	5.917	14.700	10	1.01E+02	0.00E+00	1.01E+02	1.75E+02	0.00E+00	7.70E-01	1.02E+02	8
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	7.93E+01	0.00E+00	3.49E-01	3.49E-01	2
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	7.11E+01	0.00E+00	3.13E-01	3.13E-01	2
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	6.56E+01	0.00E+00	2.89E-01	2.89E-01	2
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	2.29E+01	0.00E+00	1.01E-01	1.01E-01	1
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	2.03E+01	0.00E+00	8.93E-02	8.93E-02	1
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	1.75E+01	0.00E+00	7.70E-02	7.70E-02	1
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	3.05E+01	0.00E+00	1.34E-01	1.34E-01	1
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	2.56E+01	0.00E+00	1.13E-01	1.13E-01	1
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	3.98E+01	0.00E+00	1.75E-01	1.75E-01	1
325	5.702	14.442	10	2.55E+01	0.00E+00	2.55E+01	2.06E+02	0.00E+00	9.06E-01	2.64E+01	5
326	5.689	14.515	10	2.79E+01	0.00E+00	2.79E+01	2.46E+02	0.00E+00	1.08E+00	2.90E+01	5
327	5.512	14.539	10	1.31E+02	0.00E+00	1.31E+02	3.65E+02	0.00E+00	1.61E+00	1.33E+02	8
328	5.636	14.371	10	1.47E+01	0.00E+00	1.47E+01	3.33E+02	0.00E+00	1.47E+00	1.62E+01	5
329	5.419	13.723	10	0.00E+00	0.00E+00	0.00E+00	2.47E+02	0.00E+00	1.09E+00	1.09E+00	2
330	5.408	13.795	10	0.00E+00	0.00E+00	0.00E+00	2.65E+02	0.00E+00	1.17E+00	1.17E+00	2
331	5.493	13.630	10	1.38E-01	0.00E+00	1.38E-01	2.01E+02	0.00E+00	8.84E-01	1.02E+00	2
332	5.361	13.699	10	0.00E+00	0.00E+00	0.00E+00	1.61E+02	0.00E+00	7.08E-01	7.08E-01	2
333	5.363	13.843	10	2.68E+00	0.00E+00	2.68E+00	2.56E+02	0.00E+00	1.13E+00	3.81E+00	3
334	5.691	13.943	10	1.04E+02	0.00E+00	1.04E+02	5.35E+02	0.00E+00	2.35E+00	1.06E+02	8
335	5.690	14.073	10	1.54E+02	0.00E+00	1.54E+02	5.61E+02	0.00E+00	2.47E+00	1.56E+02	8
336	5.654	14.156	10	3.52E+01	0.00E+00	3.52E+01	2.59E+02	0.00E+00	1.14E+00	3.63E+01	6
337	5.627	13.811	10	3.55E+01	0.00E+00	3.55E+01	5.10E+02	0.00E+00	2.24E+00	3.77E+01	6
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	7.04E-02	0.00E+00	3.10E-04	3.10E-04	1
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	4.18E-02	0.00E+00	1.84E-04	1.84E-04	1
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	2.45E-01	0.00E+00	1.08E-03	1.08E-03	1
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	4.37E-01	0.00E+00	1.92E-03	1.92E-03	1
348	6.048	14.515	10	1.54E+02	0.00E+00	1.54E+02	2.87E+02	0.00E+00	1.26E+00	1.55E+02	8
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	2.40E+01	0.00E+00	1.06E-01	1.06E-01	1
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	3.47E+01	0.00E+00	1.53E-01	1.53E-01	1
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	2.49E+01	0.00E+00	1.10E-01	1.10E-01	1
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	3.36E+01	0.00E+00	1.48E-01	1.48E-01	1
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	4.58E+01	0.00E+00	2.02E-01	2.02E-01	1
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	5.92E+01	0.00E+00	2.60E-01	2.60E-01	2
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	5.62E+01	0.00E+00	2.47E-01	2.47E-01	1
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	6.81E+01	0.00E+00	3.00E-01	3.00E-01	2
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	1.21E+02	0.00E+00	5.32E-01	5.32E-01	2
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	1.01E+02	0.00E+00	4.44E-01	4.44E-01	2
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	8.46E+01	0.00E+00	3.72E-01	3.72E-01	2
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	1.33E+02	0.00E+00	5.85E-01	5.85E-01	2
361	6.165	13.823	10	1.14E+01	0.00E+00	1.14E+01	1.55E+02	0.00E+00	6.82E-01	1.21E+01	4
362	6.119	13.900	10	5.74E+01	0.00E+00	5.74E+01	3.39E+02	0.00E+00	1.49E+00	5.89E+01	7
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	1.27E+01	0.00E+00	5.59E-02	5.59E-02	1
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	1.25E+01	0.00E+00	5.50E-02	5.50E-02	1
418	5.228	13.115	7	0.00E+00	0.00E+00	0.00E+00	2.63E+01	0.00E+00	1.16E-01	1.16E-01	1
419	5.264	13.099	7	0.00E+00	0.00E+00	0.00E+00	3.02E+01	0.00E+00	1.33E-01	1.33E-01	1
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	1.84E-02	0.00E+00	8.10E-05	8.10E-05	1
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	4.04E-02	0.00E+00	1.78E-04	1.78E-04	1
422	4.992	13.086	7	0.00E+00	0.00E+00	0.00E+00	2.45E-01	0.00E+00	1.08E-03	1.08E-03	1
423	4.962	13.219	7	0.00E+00	0.00E+00	0.00E+00	1.07E-01	0.00E+00	4.71E-04	4.71E-04	1
424	5.069	14.379	7	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	6.07E-07	6.07E-07	1
425	5.100	14.393	7	4.45E-04	0.00E+00	4.45E-04	8.00E-04	0.00E+00	3.52E-06	4.49E-04	1
439	5.211	12.851	8	0.00E+00	0.00E+00	0.00E+00	6.67E+00	0.00E+00	2.93E-02	2.93E-02	1
442	5.998	14.225	8	2.27E+02	0.00E+00	2.27E+02	5.93E+02	0.00E+00	2.61E+00	2.30E+02	8
443	5.724	13.641	8	3.68E+00	0.00E+00	3.68E+00	2.18E+02	0.00E+00	9.59E-01	4.64E+00	3
444	5.772	13.525	8	0.00E+00	0.00E+00	0.00E+00	1.75E+02	0.00E+00	7.70E-01	7.70E-01	2
445	5.724	13.585	8	0.00E+00	0.00E+00	0.00E+00	1.90E+02	0.00E+00	8.36E-01	8.36E-01	2

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

446	5.932	13.871	8	5.37E+00	0.00E+00	5.37E+00	2.22E+02	0.00E+00	9.77E-01	6.35E+00	4
447	5.920	13.941	8	5.35E+00	0.00E+00	5.35E+00	2.67E+02	0.00E+00	1.17E+00	6.52E+00	4
448	5.927	13.817	8	6.11E+00	0.00E+00	6.11E+00	2.15E+02	0.00E+00	9.46E-01	7.06E+00	4

Sarin (GB) 250kg Bomb
Light Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (5.80, 15.00)											
2	6.092	14.323	10	2.18E-01	0.00E+00	2.18E-01	2.18E-01	0.00E+00	9.59E-04	2.19E-01	1
3	6.056	14.272	10	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
4	5.928	14.340	10	7.07E+01	0.00E+00	7.07E+01	7.07E+01	0.00E+00	3.11E-01	7.10E+01	7
5	5.996	14.233	10	6.50E+01	0.00E+00	6.50E+01	6.50E+01	0.00E+00	2.86E-01	6.53E+01	7
6	5.940	14.453	10	1.07E+02	0.00E+00	1.07E+02	1.07E+02	0.00E+00	4.71E-01	1.07E+02	8
71	5.648	12.900	10	3.10E+00	0.00E+00	3.10E+00	3.10E+00	0.00E+00	1.36E-02	3.11E+00	3
97	5.610	14.388	10	1.46E+00	0.00E+00	1.46E+00	1.46E+00	0.00E+00	6.42E-03	1.47E+00	2
99	5.616	14.500	10	3.75E-01	0.00E+00	3.75E-01	3.75E-01	0.00E+00	1.65E-03	3.77E-01	2
100	5.667	14.564	10	4.73E+01	0.00E+00	4.73E+01	4.73E+01	0.00E+00	2.08E-01	4.75E+01	6
106	5.642	13.947	10	2.25E+01	0.00E+00	2.25E+01	2.25E+01	0.00E+00	9.90E-02	2.26E+01	5
107	5.653	13.814	10	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
108	5.627	14.130	10	1.63E+01	0.00E+00	1.63E+01	1.63E+01	0.00E+00	7.17E-02	1.64E+01	5
109	5.702	14.036	10	4.85E+01	0.00E+00	4.85E+01	4.85E+01	0.00E+00	2.13E-01	4.87E+01	6
120	6.033	14.438	10	3.06E+01	0.00E+00	3.06E+01	3.06E+01	0.00E+00	1.35E-01	3.07E+01	6
121	6.032	12.989	10	6.73E+00	0.00E+00	6.73E+00	6.73E+00	0.00E+00	2.96E-02	6.76E+00	4
122	5.929	12.964	10	8.00E+00	0.00E+00	8.00E+00	8.00E+00	0.00E+00	3.52E-02	8.04E+00	4
123	6.033	12.883	10	3.59E+00	0.00E+00	3.59E+00	3.59E+00	0.00E+00	1.58E-02	3.61E+00	3
124	5.934	12.874	10	6.54E+00	0.00E+00	6.54E+00	6.54E+00	0.00E+00	2.88E-02	6.57E+00	4
125	5.888	13.090	10	6.61E+00	0.00E+00	6.61E+00	6.61E+00	0.00E+00	2.91E-02	6.64E+00	4
126	5.793	13.170	10	8.84E+00	0.00E+00	8.84E+00	8.84E+00	0.00E+00	3.89E-02	8.88E+00	4
127	5.789	13.080	10	6.88E+00	0.00E+00	6.88E+00	6.88E+00	0.00E+00	3.03E-02	6.91E+00	4
128	5.929	13.162	10	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
129	6.018	13.474	10	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
130	6.010	13.396	10	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.39E-02	1.69E+01	5
131	6.016	13.310	10	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
132	6.074	13.908	10	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
133	6.062	13.731	10	1.38E+01	0.00E+00	1.38E+01	1.38E+01	0.00E+00	6.07E-02	1.39E+01	4
134	6.072	13.821	10	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
179	5.928	14.339	8	7.06E+01	0.00E+00	7.06E+01	7.06E+01	0.00E+00	3.11E-01	7.09E+01	7
180	5.764	13.557	8	2.01E+01	0.00E+00	2.01E+01	2.01E+01	0.00E+00	8.84E-02	2.02E+01	5
181	5.766	13.622	8	2.18E+01	0.00E+00	2.18E+01	2.18E+01	0.00E+00	9.59E-02	2.19E+01	5
182	5.767	13.674	8	2.30E+01	0.00E+00	2.30E+01	2.30E+01	0.00E+00	1.01E-01	2.31E+01	5
183	5.958	13.839	8	3.66E+01	0.00E+00	3.66E+01	3.66E+01	0.00E+00	1.61E-01	3.68E+01	6
184	5.913	13.903	8	2.86E+01	0.00E+00	2.86E+01	2.86E+01	0.00E+00	1.26E-01	2.87E+01	5
185	5.912	13.851	8	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
192	5.991	14.398	10	1.18E+02	0.00E+00	1.18E+02	1.18E+02	0.00E+00	5.19E-01	1.19E+02	8
193	6.000	14.484	10	1.01E+02	0.00E+00	1.01E+02	1.01E+02	0.00E+00	4.44E-01	1.01E+02	8
194	6.059	14.191	10	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.13E-02	1.63E+01	5
195	6.048	14.352	10	1.99E+01	0.00E+00	1.99E+01	1.99E+01	0.00E+00	8.76E-02	2.00E+01	5
196	5.928	14.253	10	5.81E+01	0.00E+00	5.81E+01	5.81E+01	0.00E+00	2.56E-01	5.84E+01	7
197	5.995	14.318	10	8.78E+01	0.00E+00	8.78E+01	8.78E+01	0.00E+00	3.86E-01	8.82E+01	8
201	5.917	14.848	10	1.69E-02	0.00E+00	1.69E-02	1.69E-02	0.00E+00	7.44E-05	1.70E-02	1
203	5.917	14.700	10	1.86E+01	0.00E+00	1.86E+01	1.86E+01	0.00E+00	8.18E-02	1.87E+01	5
261	5.608	12.984	10	2.35E-01	0.00E+00	2.35E-01	2.35E-01	0.00E+00	1.03E-03	2.36E-01	1
286	5.702	14.442	10	1.30E+02	0.00E+00	1.30E+02	1.30E+02	0.00E+00	5.72E-01	1.31E+02	8
287	5.689	14.515	10	1.19E+02	0.00E+00	1.19E+02	1.19E+02	0.00E+00	5.24E-01	1.20E+02	8
289	5.636	14.371	10	1.79E+01	0.00E+00	1.79E+01	1.79E+01	0.00E+00	7.88E-02	1.80E+01	5
295	5.691	13.943	10	3.83E+01	0.00E+00	3.83E+01	3.83E+01	0.00E+00	1.69E-01	3.85E+01	6
296	5.690	14.073	10	4.73E+01	0.00E+00	4.73E+01	4.73E+01	0.00E+00	2.08E-01	4.75E+01	6
297	5.654	14.156	10	3.27E+01	0.00E+00	3.27E+01	3.27E+01	0.00E+00	1.44E-01	3.28E+01	6
298	5.627	13.811	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
309	6.048	14.515	10	7.58E+00	0.00E+00	7.58E+00	7.58E+00	0.00E+00	3.34E-02	7.61E+00	4
310	6.052	12.911	10	4.45E-01	0.00E+00	4.45E-01	4.45E-01	0.00E+00	1.96E-03	4.47E-01	2
311	6.039	13.007	10	5.68E+00	0.00E+00	5.68E+00	5.68E+00	0.00E+00	2.50E-02	5.70E+00	3
312	5.955	12.889	10	8.20E+00	0.00E+00	8.20E+00	8.20E+00	0.00E+00	3.61E-02	8.24E+00	4
313	5.960	12.980	10	9.36E+00	0.00E+00	9.36E+00	9.36E+00	0.00E+00	4.12E-02	9.40E+00	4
314	5.884	13.058	10	5.57E+00	0.00E+00	5.57E+00	5.57E+00	0.00E+00	2.45E-02	5.59E+00	3
315	5.911	13.172	10	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
316	5.823	13.093	10	4.68E-01	0.00E+00	4.68E-01	4.68E-01	0.00E+00	2.06E-03	4.70E-01	2

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

317	5.820	13.172	10	3.78E+00	0.00E+00	3.78E+00	3.78E+00	0.00E+00	1.66E-02	3.80E+00	3
318	6.039	13.482	10	1.47E+01	0.00E+00	1.47E+01	1.47E+01	0.00E+00	6.47E-02	1.48E+01	4
319	6.038	13.406	10	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
320	6.041	13.323	10	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
323	6.119	13.900	10	8.09E-01	0.00E+00	8.09E-01	8.09E-01	0.00E+00	3.56E-03	8.13E-01	2
369	5.998	14.225	8	6.12E+01	0.00E+00	6.12E+01	6.12E+01	0.00E+00	2.69E-01	6.15E+01	7
370	5.724	13.641	8	2.66E+01	0.00E+00	2.66E+01	2.66E+01	0.00E+00	1.17E-01	2.67E+01	5
371	5.772	13.525	8	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
372	5.724	13.585	8	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.06E-01	2.42E+01	5
373	5.932	13.871	8	3.27E+01	0.00E+00	3.27E+01	3.27E+01	0.00E+00	1.44E-01	3.28E+01	6
374	5.920	13.941	8	3.27E+01	0.00E+00	3.27E+01	3.27E+01	0.00E+00	1.44E-01	3.28E+01	6
375	5.927	13.817	8	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.29E-01	2.94E+01	5

Case 2: Protected				2 rounds at aimpoint (5.30, 12.80)							
70	5.463	12.826	10	3.18E+00	0.00E+00	3.18E+00	3.18E+00	0.00E+00	2.13E-02	3.20E+00	3
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	3.58E+00	0.00E+00	1.58E-02	1.58E-02	1
297	5.496	12.799	10	2.16E+01	0.00E+00	2.16E+01	2.87E+01	0.00E+00	1.26E-01	2.17E+01	5
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	1.86E+01	0.00E+00	8.18E-02	8.18E-02	1

Sarin (GB) 250kg Bomb
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected				12 rounds at aimpoint (5.70, 16.30)							
1	6.093	14.476	10	1.72E+01	0.00E+00	1.72E+01	1.72E+01	0.00E+00	7.57E-02	1.73E+01	5
2	6.092	14.323	10	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.91E-02	1.58E+01	5
3	6.056	14.272	10	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
4	5.928	14.340	10	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
5	5.996	14.233	10	2.33E+01	0.00E+00	2.33E+01	2.33E+01	0.00E+00	1.03E-01	2.34E+01	5
6	5.940	14.453	10	3.11E+01	0.00E+00	3.11E+01	3.11E+01	0.00E+00	1.37E-01	3.12E+01	6
10	5.849	14.797	10	4.56E+01	0.00E+00	4.56E+01	4.56E+01	0.00E+00	2.01E-01	4.58E+01	6
11	5.840	14.745	10	4.41E+01	0.00E+00	4.41E+01	4.41E+01	0.00E+00	1.94E-01	4.43E+01	6
12	5.853	14.870	10	4.82E+01	0.00E+00	4.82E+01	4.82E+01	0.00E+00	2.12E-01	4.84E+01	6
35	5.984	15.987	10	1.77E+02	0.00E+00	1.77E+02	1.77E+02	0.00E+00	7.79E-01	1.78E+02	8
36	6.098	15.997	10	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
40	5.550	13.245	10	8.22E+00	0.00E+00	8.22E+00	8.22E+00	0.00E+00	3.62E-02	8.26E+00	4
41	5.474	13.201	10	5.02E+00	0.00E+00	5.02E+00	5.02E+00	0.00E+00	2.21E-02	5.04E+00	3
42	5.507	13.288	10	6.79E+00	0.00E+00	6.79E+00	6.79E+00	0.00E+00	2.99E-02	6.82E+00	4
67	5.560	12.798	10	4.35E+00	0.00E+00	4.35E+00	4.35E+00	0.00E+00	1.91E-02	4.37E+00	3
68	5.483	12.959	10	3.85E+00	0.00E+00	3.85E+00	3.85E+00	0.00E+00	1.69E-02	3.87E+00	3
69	5.563	12.908	10	5.61E+00	0.00E+00	5.61E+00	5.61E+00	0.00E+00	2.47E-02	5.63E+00	3
70	5.463	12.826	10	2.25E+00	0.00E+00	2.25E+00	2.25E+00	0.00E+00	9.90E-03	2.26E+00	2
71	5.648	12.900	10	7.20E+00	0.00E+00	7.20E+00	7.20E+00	0.00E+00	3.17E-02	7.23E+00	4
72	5.451	12.890	10	2.27E+00	0.00E+00	2.27E+00	2.27E+00	0.00E+00	9.99E-03	2.28E+00	2
94	5.423	15.512	10	7.12E+00	0.00E+00	7.12E+00	7.12E+00	0.00E+00	3.13E-02	7.15E+00	4
95	5.601	15.674	10	1.10E+02	0.00E+00	1.10E+02	1.10E+02	0.00E+00	4.84E-01	1.10E+02	8
96	5.747	15.847	10	1.81E+02	0.00E+00	1.81E+02	1.81E+02	0.00E+00	7.96E-01	1.82E+02	8
97	5.610	14.388	10	2.75E+01	0.00E+00	2.75E+01	2.75E+01	0.00E+00	1.21E-01	2.76E+01	5
98	5.554	14.447	10	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
99	5.616	14.500	10	3.11E+01	0.00E+00	3.11E+01	3.11E+01	0.00E+00	1.37E-01	3.12E+01	6
100	5.667	14.564	10	3.56E+01	0.00E+00	3.56E+01	3.56E+01	0.00E+00	1.57E-01	3.58E+01	6
101	5.392	13.905	10	4.57E+00	0.00E+00	4.57E+00	4.57E+00	0.00E+00	2.01E-02	4.59E+00	3
102	5.474	13.777	10	9.05E+00	0.00E+00	9.05E+00	9.05E+00	0.00E+00	3.98E-02	9.09E+00	4
103	5.406	13.666	10	4.68E+00	0.00E+00	4.68E+00	4.68E+00	0.00E+00	2.06E-02	4.70E+00	3
104	5.461	13.842	10	8.63E+00	0.00E+00	8.63E+00	8.63E+00	0.00E+00	3.80E-02	8.67E+00	4
105	5.476	13.706	10	8.76E+00	0.00E+00	8.76E+00	8.76E+00	0.00E+00	3.85E-02	8.80E+00	4
106	5.642	13.947	10	2.12E+01	0.00E+00	2.12E+01	2.12E+01	0.00E+00	9.33E-02	2.13E+01	5
107	5.653	13.814	10	1.94E+01	0.00E+00	1.94E+01	1.94E+01	0.00E+00	8.54E-02	1.95E+01	5
108	5.627	14.130	10	2.34E+01	0.00E+00	2.34E+01	2.34E+01	0.00E+00	1.03E-01	2.35E+01	5
109	5.702	14.036	10	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
110	5.702	12.379	10	5.69E-01	0.00E+00	5.69E-01	5.69E-01	0.00E+00	2.50E-03	5.72E-01	2
120	6.033	14.438	10	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
121	6.032	12.989	10	6.19E+00	0.00E+00	6.19E+00	6.19E+00	0.00E+00	2.72E-02	6.22E+00	4
122	5.929	12.964	10	8.07E+00	0.00E+00	8.07E+00	8.07E+00	0.00E+00	3.55E-02	8.11E+00	4
123	6.033	12.883	10	5.14E+00	0.00E+00	5.14E+00	5.14E+00	0.00E+00	2.26E-02	5.16E+00	3
124	5.934	12.874	10	6.98E+00	0.00E+00	6.98E+00	6.98E+00	0.00E+00	3.07E-02	7.01E+00	4
125	5.888	13.090	10	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
126	5.793	13.170	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
127	5.789	13.080	10	9.78E+00	0.00E+00	9.78E+00	9.78E+00	0.00E+00	4.30E-02	9.82E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

128	5.929	13.162	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
129	6.018	13.474	10	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
130	6.010	13.396	10	1.08E+01	0.00E+00	1.08E+01	1.08E+01	0.00E+00	4.75E-02	1.08E+01	4
131	6.016	13.310	10	9.51E+00	0.00E+00	9.51E+00	9.51E+00	0.00E+00	4.18E-02	9.55E+00	4
132	6.074	13.908	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
133	6.062	13.731	10	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
134	6.072	13.821	10	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
190	5.817	12.688	7	4.43E+00	0.00E+00	4.43E+00	4.43E+00	0.00E+00	1.95E-02	4.45E+00	3
191	5.850	12.720	7	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.06E-02	4.71E+00	3
210	5.928	14.339	8	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
211	5.764	13.557	8	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
212	5.766	13.622	8	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
213	5.767	13.674	8	1.90E+01	0.00E+00	1.90E+01	1.90E+01	0.00E+00	8.36E-02	1.91E+01	5
214	5.958	13.839	8	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
215	5.913	13.903	8	2.14E+01	0.00E+00	2.14E+01	2.14E+01	0.00E+00	9.42E-02	2.15E+01	5
216	5.912	13.851	8	2.06E+01	0.00E+00	2.06E+01	2.06E+01	0.00E+00	9.06E-02	2.07E+01	5
231	5.991	14.398	10	2.68E+01	0.00E+00	2.68E+01	2.68E+01	0.00E+00	1.18E-01	2.69E+01	5
232	6.000	14.484	10	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5
233	6.059	14.191	10	1.74E+01	0.00E+00	1.74E+01	1.74E+01	0.00E+00	7.66E-02	1.75E+01	5
234	6.048	14.352	10	2.05E+01	0.00E+00	2.05E+01	2.05E+01	0.00E+00	9.02E-02	2.06E+01	5
235	5.928	14.253	10	2.73E+01	0.00E+00	2.73E+01	2.73E+01	0.00E+00	1.20E-01	2.74E+01	5
236	5.995	14.318	10	2.49E+01	0.00E+00	2.49E+01	2.49E+01	0.00E+00	1.10E-01	2.50E+01	5
240	5.917	14.848	10	4.70E+01	0.00E+00	4.70E+01	4.70E+01	0.00E+00	2.07E-01	4.72E+01	6
241	5.911	14.774	10	4.44E+01	0.00E+00	4.44E+01	4.44E+01	0.00E+00	1.95E-01	4.46E+01	6
242	5.917	14.700	10	4.09E+01	0.00E+00	4.09E+01	4.09E+01	0.00E+00	1.80E-01	4.11E+01	6
264	6.044	15.980	10	1.99E+02	0.00E+00	1.99E+02	1.99E+02	0.00E+00	8.76E-01	2.00E+02	8
269	5.451	13.254	10	4.49E+00	0.00E+00	4.49E+00	4.49E+00	0.00E+00	1.98E-02	4.51E+00	3
270	5.514	13.209	10	6.56E+00	0.00E+00	6.56E+00	6.56E+00	0.00E+00	2.89E-02	6.59E+00	4
271	5.566	13.193	10	8.25E+00	0.00E+00	8.25E+00	8.25E+00	0.00E+00	3.63E-02	8.29E+00	4
295	5.413	12.882	10	1.47E+00	0.00E+00	1.47E+00	1.47E+00	0.00E+00	6.47E-03	1.48E+00	2
296	5.537	12.816	10	4.00E+00	0.00E+00	4.00E+00	4.00E+00	0.00E+00	1.76E-02	4.02E+00	3
297	5.496	12.799	10	2.79E+00	0.00E+00	2.79E+00	2.79E+00	0.00E+00	1.23E-02	2.80E+00	2
298	5.561	12.909	10	5.57E+00	0.00E+00	5.57E+00	5.57E+00	0.00E+00	2.45E-02	5.59E+00	3
299	5.615	12.839	10	5.94E+00	0.00E+00	5.94E+00	5.94E+00	0.00E+00	2.61E-02	5.97E+00	3
300	5.608	12.984	10	7.44E+00	0.00E+00	7.44E+00	7.44E+00	0.00E+00	3.27E-02	7.47E+00	4
323	5.639	15.789	10	1.56E+02	0.00E+00	1.56E+02	1.56E+02	0.00E+00	6.86E-01	1.57E+02	8
324	5.484	15.661	10	4.28E+01	0.00E+00	4.28E+01	4.28E+01	0.00E+00	1.88E-01	4.30E+01	6
325	5.702	14.442	10	3.27E+01	0.00E+00	3.27E+01	3.27E+01	0.00E+00	1.44E-01	3.28E+01	6
326	5.689	14.515	10	3.51E+01	0.00E+00	3.51E+01	3.51E+01	0.00E+00	1.54E-01	3.53E+01	6
327	5.512	14.539	10	2.04E+01	0.00E+00	2.04E+01	2.04E+01	0.00E+00	8.98E-02	2.05E+01	5
328	5.636	14.371	10	2.87E+01	0.00E+00	2.87E+01	2.87E+01	0.00E+00	1.26E-01	2.88E+01	5
329	5.419	13.723	10	5.58E+00	0.00E+00	5.58E+00	5.58E+00	0.00E+00	2.46E-02	5.60E+00	3
330	5.408	13.795	10	4.98E+00	0.00E+00	4.98E+00	4.98E+00	0.00E+00	2.19E-02	5.00E+00	3
331	5.493	13.630	10	9.11E+00	0.00E+00	9.11E+00	9.11E+00	0.00E+00	4.01E-02	9.15E+00	4
332	5.361	13.699	10	2.78E+00	0.00E+00	2.78E+00	2.78E+00	0.00E+00	1.22E-02	2.79E+00	2
333	5.363	13.843	10	3.01E+00	0.00E+00	3.01E+00	3.01E+00	0.00E+00	1.32E-02	3.02E+00	3
334	5.691	13.943	10	2.27E+01	0.00E+00	2.27E+01	2.27E+01	0.00E+00	9.99E-02	2.28E+01	5
335	5.690	14.073	10	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
336	5.654	14.156	10	2.53E+01	0.00E+00	2.53E+01	2.53E+01	0.00E+00	1.11E-01	2.54E+01	5
337	5.627	13.811	10	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
341	5.706	12.340	10	2.82E-01	0.00E+00	2.82E-01	2.82E-01	0.00E+00	1.24E-03	2.83E-01	2
348	6.048	14.515	10	2.37E+01	0.00E+00	2.37E+01	2.37E+01	0.00E+00	1.04E-01	2.38E+01	5
349	6.052	12.911	10	4.83E+00	0.00E+00	4.83E+00	4.83E+00	0.00E+00	2.13E-02	4.85E+00	3
350	6.039	13.007	10	6.18E+00	0.00E+00	6.18E+00	6.18E+00	0.00E+00	2.72E-02	6.21E+00	4
351	5.955	12.889	10	6.99E+00	0.00E+00	6.99E+00	6.99E+00	0.00E+00	3.08E-02	7.02E+00	4
352	5.960	12.980	10	7.82E+00	0.00E+00	7.82E+00	7.82E+00	0.00E+00	3.44E-02	7.85E+00	4
353	5.884	13.058	10	9.63E+00	0.00E+00	9.63E+00	9.63E+00	0.00E+00	4.24E-02	9.67E+00	4
354	5.911	13.172	10	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.88E-02	1.11E+01	4
355	5.823	13.093	10	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
356	5.820	13.172	10	1.11E+01	0.00E+00	1.11E+01	1.11E+01	0.00E+00	4.88E-02	1.11E+01	4
357	6.039	13.482	10	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
358	6.038	13.406	10	9.86E+00	0.00E+00	9.86E+00	9.86E+00	0.00E+00	4.34E-02	9.90E+00	4
359	6.041	13.323	10	8.81E+00	0.00E+00	8.81E+00	8.81E+00	0.00E+00	3.88E-02	8.85E+00	4
360	6.145	13.753	10	6.90E+00	0.00E+00	6.90E+00	6.90E+00	0.00E+00	3.04E-02	6.93E+00	4
361	6.165	13.823	10	6.08E+00	0.00E+00	6.08E+00	6.08E+00	0.00E+00	2.68E-02	6.11E+00	4
362	6.119	13.900	10	9.49E+00	0.00E+00	9.49E+00	9.49E+00	0.00E+00	4.18E-02	9.53E+00	4
405	6.245	15.441	7	4.82E-02	0.00E+00	4.82E-02	4.82E-02	0.00E+00	2.12E-04	4.84E-02	1
416	5.798	12.686	7	4.46E+00	0.00E+00	4.46E+00	4.46E+00	0.00E+00	1.96E-02	4.48E+00	3
417	5.881	12.714	7	4.79E+00	0.00E+00	4.79E+00	4.79E+00	0.00E+00	2.11E-02	4.81E+00	3
442	5.998	14.225	8	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
443	5.724	13.641	8	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
444	5.772	13.525	8	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5
445	5.724	13.585	8	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

446	5.932	13.871	8	2.03E+01	0.00E+00	2.03E+01	2.03E+01	0.00E+00	8.93E-02	2.04E+01	5
447	5.920	13.941	8	2.19E+01	0.00E+00	2.19E+01	2.19E+01	0.00E+00	9.64E-02	2.20E+01	5
448	5.927	13.817	8	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.58E-02	1.96E+01	5
Case 2: Protected 12 rounds at aimpoint (5.80, 12.90)											
67	5.560	12.798	10	1.79E+01	0.00E+00	1.79E+01	2.83E+01	0.00E+00	1.25E-01	1.80E+01	5
69	5.563	12.908	10	1.75E+01	0.00E+00	1.75E+01	3.37E+01	0.00E+00	1.48E-01	1.76E+01	5
71	5.648	12.900	10	3.44E+00	0.00E+00	3.44E+00	6.65E+00	0.00E+00	2.93E-02	3.47E+00	3
75	6.278	11.645	10	0.00E+00	0.00E+00	0.00E+00	4.98E+00	0.00E+00	2.19E-02	2.19E-02	1
76	5.720	11.676	10	0.00E+00	0.00E+00	0.00E+00	3.77E+01	0.00E+00	1.66E-01	1.66E-01	1
77	5.601	11.699	10	0.00E+00	0.00E+00	0.00E+00	2.24E+01	0.00E+00	9.86E-02	9.86E-02	1
80	6.177	11.646	10	0.00E+00	0.00E+00	0.00E+00	2.10E+01	0.00E+00	9.24E-02	9.24E-02	1
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	1.18E+02	0.00E+00	5.19E-01	5.19E-01	2
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	1.10E+02	0.00E+00	4.84E-01	4.84E-01	2
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	1.06E+02	0.00E+00	4.66E-01	4.66E-01	2
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	9.09E+01	0.00E+00	4.00E-01	4.00E-01	2
123	6.033	12.883	10	3.47E+01	0.00E+00	3.47E+01	5.98E+01	0.00E+00	2.63E-01	3.50E+01	6
124	5.934	12.874	10	3.27E+01	0.00E+00	3.27E+01	5.58E+01	0.00E+00	2.46E-01	3.29E+01	6
190	5.817	12.688	7	2.47E+01	0.00E+00	2.47E+01	1.44E+02	0.00E+00	6.34E-01	2.53E+01	5
191	5.850	12.720	7	9.90E+01	0.00E+00	9.90E+01	1.61E+02	0.00E+00	7.08E-01	9.97E+01	8
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	1.96E+00	0.00E+00	8.62E-03	8.62E-03	1
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	3.53E+01	0.00E+00	1.55E-01	1.55E-01	1
298	5.561	12.909	10	1.44E+01	0.00E+00	1.44E+01	2.79E+01	0.00E+00	1.23E-01	1.45E+01	4
299	5.615	12.839	10	8.12E+01	0.00E+00	8.12E+01	1.31E+02	0.00E+00	5.76E-01	8.18E+01	8
302	6.396	11.688	10	0.00E+00	0.00E+00	0.00E+00	2.61E-02	0.00E+00	1.15E-04	1.15E-04	1
303	6.276	11.651	10	0.00E+00	0.00E+00	0.00E+00	5.34E+00	0.00E+00	2.35E-02	2.35E-02	1
304	5.755	11.682	10	0.00E+00	0.00E+00	0.00E+00	4.02E+01	0.00E+00	1.77E-01	1.77E-01	1
305	5.635	11.734	10	0.00E+00	0.00E+00	0.00E+00	3.42E+01	0.00E+00	1.50E-01	1.50E-01	1
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	1.04E+02	0.00E+00	4.58E-01	4.58E-01	2
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	1.01E+02	0.00E+00	4.44E-01	4.44E-01	2
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	1.20E+02	0.00E+00	5.28E-01	5.28E-01	2
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	1.15E+02	0.00E+00	5.06E-01	5.06E-01	2
349	6.052	12.911	10	3.41E+00	0.00E+00	3.41E+00	5.94E+00	0.00E+00	2.61E-02	3.44E+00	3
351	5.955	12.889	10	1.03E+01	0.00E+00	1.03E+01	1.79E+01	0.00E+00	7.88E-02	1.04E+01	4
416	5.798	12.686	7	3.14E+00	0.00E+00	3.14E+00	1.43E+02	0.00E+00	6.29E-01	3.77E+00	3
417	5.881	12.714	7	3.84E+01	0.00E+00	3.84E+01	1.45E+02	0.00E+00	6.38E-01	3.90E+01	6
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	5.11E+01	0.00E+00	2.25E-01	2.25E-01	1
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	4.03E+00	0.00E+00	1.77E-02	1.77E-02	1

Sarin (GB) 250kg Bomb
Heavy Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected				24 rounds at aimpoint (5.70, 17.30)							
1	6.093	14.476	10	2.02E+01	0.00E+00	2.02E+01	2.02E+01	0.00E+00	8.89E-02	2.03E+01	5
2	6.092	14.323	10	1.87E+01	0.00E+00	1.87E+01	1.87E+01	0.00E+00	8.23E-02	1.88E+01	5
3	6.056	14.272	10	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5
4	5.928	14.340	10	3.25E+01	0.00E+00	3.25E+01	3.25E+01	0.00E+00	1.43E-01	3.26E+01	6
5	5.996	14.233	10	2.60E+01	0.00E+00	2.60E+01	2.60E+01	0.00E+00	1.14E-01	2.61E+01	5
6	5.940	14.453	10	3.40E+01	0.00E+00	3.40E+01	3.40E+01	0.00E+00	1.50E-01	3.41E+01	6
10	5.849	14.797	10	4.68E+01	0.00E+00	4.68E+01	4.68E+01	0.00E+00	2.06E-01	4.70E+01	6
11	5.840	14.745	10	4.56E+01	0.00E+00	4.56E+01	4.56E+01	0.00E+00	2.01E-01	4.58E+01	6
12	5.853	14.870	10	4.85E+01	0.00E+00	4.85E+01	4.85E+01	0.00E+00	2.13E-01	4.87E+01	6
33	6.293	15.680	10	8.89E-01	0.00E+00	8.89E-01	8.89E-01	0.00E+00	3.91E-03	8.93E-01	2
34	6.177	16.004	10	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
35	5.984	15.987	10	9.48E+01	0.00E+00	9.48E+01	9.48E+01	0.00E+00	4.17E-01	9.52E+01	8
36	6.098	15.997	10	5.01E+01	0.00E+00	5.01E+01	5.01E+01	0.00E+00	2.20E-01	5.03E+01	7
40	5.550	13.245	10	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
41	5.474	13.201	10	7.83E+00	0.00E+00	7.83E+00	7.83E+00	0.00E+00	3.45E-02	7.86E+00	4
42	5.507	13.288	10	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
67	5.560	12.798	10	7.80E+00	0.00E+00	7.80E+00	7.80E+00	0.00E+00	3.43E-02	7.83E+00	4
68	5.483	12.959	10	6.31E+00	0.00E+00	6.31E+00	6.31E+00	0.00E+00	2.78E-02	6.34E+00	4
69	5.563	12.908	10	8.90E+00	0.00E+00	8.90E+00	8.90E+00	0.00E+00	3.92E-02	8.94E+00	4
70	5.463	12.826	10	4.77E+00	0.00E+00	4.77E+00	4.77E+00	0.00E+00	2.10E-02	4.79E+00	3
71	5.648	12.900	10	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
72	5.451	12.890	10	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.09E-02	4.78E+00	3
94	5.423	15.512	10	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
95	5.601	15.674	10	7.27E+01	0.00E+00	7.27E+01	7.27E+01	0.00E+00	3.20E-01	7.30E+01	7
96	5.747	15.847	10	9.13E+01	0.00E+00	9.13E+01	9.13E+01	0.00E+00	4.02E-01	9.17E+01	8

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

97	5.610	14.388	10	2.99E+01	0.00E+00	2.99E+01	2.99E+01	0.00E+00	1.32E-01	3.00E+01	6
98	5.554	14.447	10	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
99	5.616	14.500	10	3.24E+01	0.00E+00	3.24E+01	3.24E+01	0.00E+00	1.43E-01	3.25E+01	6
100	5.667	14.564	10	3.75E+01	0.00E+00	3.75E+01	3.75E+01	0.00E+00	1.65E-01	3.77E+01	6
101	5.392	13.905	10	7.63E+00	0.00E+00	7.63E+00	7.63E+00	0.00E+00	3.36E-02	7.66E+00	4
102	5.474	13.777	10	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
103	5.406	13.666	10	7.39E+00	0.00E+00	7.39E+00	7.39E+00	0.00E+00	3.25E-02	7.42E+00	4
104	5.461	13.842	10	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
105	5.476	13.706	10	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
106	5.642	13.947	10	2.50E+01	0.00E+00	2.50E+01	2.50E+01	0.00E+00	1.10E-01	2.51E+01	5
107	5.653	13.814	10	2.35E+01	0.00E+00	2.35E+01	2.35E+01	0.00E+00	1.03E-01	2.36E+01	5
108	5.627	14.130	10	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
109	5.702	14.036	10	2.93E+01	0.00E+00	2.93E+01	2.93E+01	0.00E+00	1.29E-01	2.94E+01	5
110	5.702	12.379	10	5.32E+00	0.00E+00	5.32E+00	5.32E+00	0.00E+00	2.34E-02	5.34E+00	3
111	5.784	12.296	10	4.01E+00	0.00E+00	4.01E+00	4.01E+00	0.00E+00	1.76E-02	4.03E+00	3
112	5.875	12.255	10	3.44E+00	0.00E+00	3.44E+00	3.44E+00	0.00E+00	1.51E-02	3.46E+00	3
113	5.966	12.148	10	2.04E+00	0.00E+00	2.04E+00	2.04E+00	0.00E+00	8.98E-03	2.05E+00	2
120	6.033	14.438	10	2.58E+01	0.00E+00	2.58E+01	2.58E+01	0.00E+00	1.14E-01	2.59E+01	5
121	6.032	12.989	10	9.33E+00	0.00E+00	9.33E+00	9.33E+00	0.00E+00	4.11E-02	9.37E+00	4
122	5.929	12.964	10	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.46E-02	1.25E+01	4
123	6.033	12.883	10	8.47E+00	0.00E+00	8.47E+00	8.47E+00	0.00E+00	3.73E-02	8.51E+00	4
124	5.934	12.874	10	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
125	5.888	13.090	10	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
126	5.793	13.170	10	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
127	5.789	13.080	10	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
128	5.929	13.162	10	1.50E+01	0.00E+00	1.50E+01	1.50E+01	0.00E+00	6.60E-02	1.51E+01	5
129	6.018	13.474	10	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
130	6.010	13.396	10	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
131	6.016	13.310	10	1.32E+01	0.00E+00	1.32E+01	1.32E+01	0.00E+00	5.81E-02	1.33E+01	4
132	6.074	13.908	10	1.61E+01	0.00E+00	1.61E+01	1.61E+01	0.00E+00	7.08E-02	1.62E+01	5
133	6.062	13.731	10	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.69E-02	1.53E+01	5
134	6.072	13.821	10	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5
176	6.271	15.463	7	3.24E+00	0.00E+00	3.24E+00	3.24E+00	0.00E+00	1.43E-02	3.25E+00	3
177	6.321	15.463	7	6.85E-01	0.00E+00	6.85E-01	6.85E-01	0.00E+00	3.01E-03	6.88E-01	2
190	5.817	12.688	7	9.79E+00	0.00E+00	9.79E+00	9.79E+00	0.00E+00	4.31E-02	9.83E+00	4
191	5.850	12.720	7	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
193	5.224	13.195	7	4.15E-02	0.00E+00	4.15E-02	4.15E-02	0.00E+00	1.83E-04	4.17E-02	1
194	5.504	12.164	7	1.13E+00	0.00E+00	1.13E+00	1.13E+00	0.00E+00	4.97E-03	1.13E+00	2
195	5.583	12.163	7	1.93E+00	0.00E+00	1.93E+00	1.93E+00	0.00E+00	8.49E-03	1.94E+00	2
210	5.928	14.339	8	3.25E+01	0.00E+00	3.25E+01	3.25E+01	0.00E+00	1.43E-01	3.26E+01	6
211	5.764	13.557	8	2.31E+01	0.00E+00	2.31E+01	2.31E+01	0.00E+00	1.02E-01	2.32E+01	5
212	5.766	13.622	8	2.42E+01	0.00E+00	2.42E+01	2.42E+01	0.00E+00	1.06E-01	2.43E+01	5
213	5.767	13.674	8	2.51E+01	0.00E+00	2.51E+01	2.51E+01	0.00E+00	1.10E-01	2.52E+01	5
214	5.958	13.839	8	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
215	5.913	13.903	8	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
216	5.912	13.851	8	2.51E+01	0.00E+00	2.51E+01	2.51E+01	0.00E+00	1.10E-01	2.52E+01	5
231	5.991	14.398	10	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
232	6.000	14.484	10	2.97E+01	0.00E+00	2.97E+01	2.97E+01	0.00E+00	1.31E-01	2.98E+01	5
233	6.059	14.191	10	2.03E+01	0.00E+00	2.03E+01	2.03E+01	0.00E+00	8.93E-02	2.04E+01	5
234	6.048	14.352	10	2.33E+01	0.00E+00	2.33E+01	2.33E+01	0.00E+00	1.03E-01	2.34E+01	5
235	5.928	14.253	10	3.09E+01	0.00E+00	3.09E+01	3.09E+01	0.00E+00	1.36E-01	3.10E+01	6
236	5.995	14.318	10	2.73E+01	0.00E+00	2.73E+01	2.73E+01	0.00E+00	1.20E-01	2.74E+01	5
240	5.917	14.848	10	4.44E+01	0.00E+00	4.44E+01	4.44E+01	0.00E+00	1.95E-01	4.46E+01	6
241	5.911	14.774	10	4.31E+01	0.00E+00	4.31E+01	4.31E+01	0.00E+00	1.90E-01	4.33E+01	6
242	5.917	14.700	10	4.09E+01	0.00E+00	4.09E+01	4.09E+01	0.00E+00	1.80E-01	4.11E+01	6
261	6.241	15.673	10	4.66E+00	0.00E+00	4.66E+00	4.66E+00	0.00E+00	2.05E-02	4.68E+00	3
264	6.044	15.980	10	7.68E+01	0.00E+00	7.68E+01	7.68E+01	0.00E+00	3.38E-01	7.71E+01	8
269	5.451	13.254	10	7.10E+00	0.00E+00	7.10E+00	7.10E+00	0.00E+00	3.12E-02	7.13E+00	4
270	5.514	13.209	10	9.72E+00	0.00E+00	9.72E+00	9.72E+00	0.00E+00	4.28E-02	9.76E+00	4
271	5.566	13.193	10	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
295	5.413	12.882	10	3.41E+00	0.00E+00	3.41E+00	3.41E+00	0.00E+00	1.50E-02	3.43E+00	3
296	5.537	12.816	10	7.20E+00	0.00E+00	7.20E+00	7.20E+00	0.00E+00	3.17E-02	7.23E+00	4
297	5.496	12.799	10	5.54E+00	0.00E+00	5.54E+00	5.54E+00	0.00E+00	2.44E-02	5.56E+00	3
298	5.561	12.909	10	8.84E+00	0.00E+00	8.84E+00	8.84E+00	0.00E+00	3.89E-02	8.88E+00	4
299	5.615	12.839	10	9.75E+00	0.00E+00	9.75E+00	9.75E+00	0.00E+00	4.29E-02	9.79E+00	4
300	5.608	12.984	10	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
322	5.324	15.511	10	3.78E+00	0.00E+00	3.78E+00	3.78E+00	0.00E+00	1.66E-02	3.80E+00	3
323	5.639	15.789	10	8.43E+01	0.00E+00	8.43E+01	8.43E+01	0.00E+00	3.71E-01	8.47E+01	8
324	5.484	15.661	10	3.77E+01	0.00E+00	3.77E+01	3.77E+01	0.00E+00	1.66E-01	3.79E+01	6
325	5.702	14.442	10	3.69E+01	0.00E+00	3.69E+01	3.69E+01	0.00E+00	1.62E-01	3.71E+01	6
326	5.689	14.515	10	3.77E+01	0.00E+00	3.77E+01	3.77E+01	0.00E+00	1.66E-01	3.79E+01	6
327	5.512	14.539	10	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
328	5.636	14.371	10	3.15E+01	0.00E+00	3.15E+01	3.15E+01	0.00E+00	1.39E-01	3.16E+01	6

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

329	5.419	13.723	10	8.44E+00	0.00E+00	8.44E+00	8.44E+00	0.00E+00	3.71E-02	8.48E+00	4
330	5.408	13.795	10	8.08E+00	0.00E+00	8.08E+00	8.08E+00	0.00E+00	3.56E-02	8.12E+00	4
331	5.493	13.630	10	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
332	5.361	13.699	10	5.08E+00	0.00E+00	5.08E+00	5.08E+00	0.00E+00	2.24E-02	5.10E+00	3
333	5.363	13.843	10	5.66E+00	0.00E+00	5.66E+00	5.66E+00	0.00E+00	2.49E-02	5.68E+00	3
334	5.691	13.943	10	2.73E+01	0.00E+00	2.73E+01	2.73E+01	0.00E+00	1.20E-01	2.74E+01	5
335	5.690	14.073	10	2.94E+01	0.00E+00	2.94E+01	2.94E+01	0.00E+00	1.29E-01	2.95E+01	5
336	5.654	14.156	10	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
337	5.627	13.811	10	2.22E+01	0.00E+00	2.22E+01	2.22E+01	0.00E+00	9.77E-02	2.23E+01	5
338	5.888	12.262	10	3.56E+00	0.00E+00	3.56E+00	3.56E+00	0.00E+00	1.57E-02	3.58E+00	3
339	5.993	12.248	10	3.08E+00	0.00E+00	3.08E+00	3.08E+00	0.00E+00	1.36E-02	3.09E+00	3
340	5.752	12.293	10	4.02E+00	0.00E+00	4.02E+00	4.02E+00	0.00E+00	1.77E-02	4.04E+00	3
341	5.706	12.340	10	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.06E-02	4.71E+00	3
348	6.048	14.515	10	2.54E+01	0.00E+00	2.54E+01	2.54E+01	0.00E+00	1.12E-01	2.55E+01	5
349	6.052	12.911	10	8.15E+00	0.00E+00	8.15E+00	8.15E+00	0.00E+00	3.59E-02	8.19E+00	4
350	6.039	13.007	10	9.17E+00	0.00E+00	9.17E+00	9.17E+00	0.00E+00	4.03E-02	9.21E+00	4
351	5.955	12.889	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
352	5.960	12.980	10	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
353	5.884	13.058	10	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
354	5.911	13.172	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
355	5.823	13.093	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
356	5.820	13.172	10	1.70E+01	0.00E+00	1.70E+01	1.70E+01	0.00E+00	7.48E-02	1.71E+01	5
357	6.039	13.482	10	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
358	6.038	13.406	10	1.34E+01	0.00E+00	1.34E+01	1.34E+01	0.00E+00	5.90E-02	1.35E+01	4
359	6.041	13.323	10	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
360	6.145	13.753	10	1.00E+01	0.00E+00	1.00E+01	1.00E+01	0.00E+00	4.40E-02	1.00E+01	4
361	6.165	13.823	10	9.16E+00	0.00E+00	9.16E+00	9.16E+00	0.00E+00	4.03E-02	9.20E+00	4
362	6.119	13.900	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
404	6.339	15.451	7	2.68E-01	0.00E+00	2.68E-01	2.68E-01	0.00E+00	1.18E-03	2.69E-01	2
405	6.245	15.441	7	5.46E+00	0.00E+00	5.46E+00	5.46E+00	0.00E+00	2.40E-02	5.48E+00	3
416	5.798	12.686	7	9.63E+00	0.00E+00	9.63E+00	9.63E+00	0.00E+00	4.24E-02	9.67E+00	4
417	5.881	12.714	7	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
418	5.228	13.115	7	7.64E-03	0.00E+00	7.64E-03	7.64E-03	0.00E+00	3.36E-05	7.67E-03	1
419	5.264	13.099	7	2.21E-01	0.00E+00	2.21E-01	2.21E-01	0.00E+00	9.72E-04	2.22E-01	1
420	5.601	12.207	7	2.55E+00	0.00E+00	2.55E+00	2.55E+00	0.00E+00	1.12E-02	2.56E+00	2
421	5.517	12.227	7	1.80E+00	0.00E+00	1.80E+00	1.80E+00	0.00E+00	7.92E-03	1.81E+00	2
442	5.998	14.225	8	2.58E+01	0.00E+00	2.58E+01	2.58E+01	0.00E+00	1.14E-01	2.59E+01	5
443	5.724	13.641	8	2.36E+01	0.00E+00	2.36E+01	2.36E+01	0.00E+00	1.04E-01	2.37E+01	5
444	5.772	13.525	8	2.27E+01	0.00E+00	2.27E+01	2.27E+01	0.00E+00	9.99E-02	2.28E+01	5
445	5.724	13.585	8	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
446	5.932	13.871	8	2.45E+01	0.00E+00	2.45E+01	2.45E+01	0.00E+00	1.08E-01	2.46E+01	5
447	5.920	13.941	8	2.62E+01	0.00E+00	2.62E+01	2.62E+01	0.00E+00	1.15E-01	2.63E+01	5
448	5.927	13.817	8	2.39E+01	0.00E+00	2.39E+01	2.39E+01	0.00E+00	1.05E-01	2.40E+01	5

Case 2: Protected 24 rounds at aimpoint (5.80, 14.30)

2	6.092	14.323	10	4.37E+01	0.00E+00	4.37E+01	6.22E+01	0.00E+00	2.74E-01	4.40E+01	6
3	6.056	14.272	10	1.28E+01	0.00E+00	1.28E+01	1.90E+01	0.00E+00	8.36E-02	1.29E+01	4
4	5.928	14.340	10	7.70E+00	0.00E+00	7.70E+00	1.13E+01	0.00E+00	4.97E-02	7.75E+00	4
5	5.996	14.233	10	9.80E+01	0.00E+00	9.80E+01	1.53E+02	0.00E+00	6.73E-01	9.87E+01	8
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	2.44E+01	0.00E+00	1.07E-01	1.07E-01	1
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	3.41E+00	0.00E+00	1.50E-02	1.50E-02	1
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	7.45E+00	0.00E+00	3.28E-02	3.28E-02	1
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	1.60E+01	0.00E+00	7.04E-02	7.04E-02	1
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	5.85E+00	0.00E+00	2.57E-02	2.57E-02	1
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	2.46E+01	0.00E+00	1.08E-01	1.08E-01	1
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	2.69E+00	0.00E+00	1.18E-02	1.18E-02	1
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	5.54E+01	0.00E+00	2.44E-01	2.44E-01	1
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	1.94E+00	0.00E+00	8.54E-03	8.54E-03	1
105	5.476	13.706	10	0.00E+00	0.00E+00	0.00E+00	3.46E-02	0.00E+00	1.52E-04	1.52E-04	1
106	5.642	13.947	10	1.01E+02	0.00E+00	1.01E+02	3.25E+02	0.00E+00	1.43E+00	1.02E+02	8
107	5.653	13.814	10	1.37E+01	0.00E+00	1.37E+01	3.02E+02	0.00E+00	1.33E+00	1.50E+01	5
108	5.627	14.130	10	8.50E+01	0.00E+00	8.50E+01	1.73E+02	0.00E+00	7.61E-01	8.58E+01	8
109	5.702	14.036	10	1.04E+02	0.00E+00	1.04E+02	2.97E+02	0.00E+00	1.31E+00	1.05E+02	8
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	3.20E-01	0.00E+00	1.41E-03	1.41E-03	1
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	8.79E+01	0.00E+00	3.87E-01	3.87E-01	2
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	8.50E+01	0.00E+00	3.74E-01	3.74E-01	2
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	6.79E+01	0.00E+00	2.99E-01	2.99E-01	2
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	6.74E+01	0.00E+00	2.97E-01	2.97E-01	2
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	1.04E+02	0.00E+00	4.58E-01	4.58E-01	2
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	1.15E+02	0.00E+00	5.06E-01	5.06E-01	2
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	1.02E+02	0.00E+00	4.49E-01	4.49E-01	2
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	1.14E+02	0.00E+00	5.02E-01	5.02E-01	2
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	1.74E+02	0.00E+00	7.66E-01	7.66E-01	2
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	1.52E+02	0.00E+00	6.69E-01	6.69E-01	2

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	1.36E+02	0.00E+00	5.98E-01	5.98E-01	2
132	6.074	13.908	10	5.15E+01	0.00E+00	5.15E+01	2.99E+02	0.00E+00	1.32E+00	5.28E+01	7
133	6.062	13.731	10	0.00E+00	0.00E+00	0.00E+00	2.81E+02	0.00E+00	1.24E+00	1.24E+00	2
134	6.072	13.821	10	8.35E+00	0.00E+00	8.35E+00	2.83E+02	0.00E+00	1.25E+00	9.60E+00	4
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	2.79E+01	0.00E+00	1.23E-01	1.23E-01	1
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	3.42E+01	0.00E+00	1.50E-01	1.50E-01	1
210	5.928	14.339	8	8.48E+00	0.00E+00	8.48E+00	1.24E+01	0.00E+00	5.46E-02	8.53E+00	4
211	5.764	13.557	8	0.00E+00	0.00E+00	0.00E+00	2.09E+02	0.00E+00	9.20E-01	9.20E-01	2
212	5.766	13.622	8	0.00E+00	0.00E+00	0.00E+00	2.35E+02	0.00E+00	1.03E+00	1.03E+00	2
213	5.767	13.674	8	0.00E+00	0.00E+00	0.00E+00	2.58E+02	0.00E+00	1.14E+00	1.14E+00	2
214	5.958	13.839	8	2.58E+01	0.00E+00	2.58E+01	3.01E+02	0.00E+00	1.32E+00	2.71E+01	5
215	5.913	13.903	8	2.60E+01	0.00E+00	2.60E+01	2.79E+02	0.00E+00	1.23E+00	2.72E+01	5
216	5.912	13.851	8	1.00E+01	0.00E+00	1.00E+01	2.70E+02	0.00E+00	1.19E+00	1.12E+01	4
233	6.059	14.191	10	9.57E+01	0.00E+00	9.57E+01	1.45E+02	0.00E+00	6.38E-01	9.63E+01	8
235	5.928	14.253	10	4.84E+01	0.00E+00	4.84E+01	7.34E+01	0.00E+00	3.23E-01	4.87E+01	6
236	5.995	14.318	10	5.29E+01	0.00E+00	5.29E+01	7.66E+01	0.00E+00	3.37E-01	5.32E+01	7
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	6.97E-01	0.00E+00	3.07E-03	3.07E-03	1
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	1.12E+01	0.00E+00	4.93E-02	4.93E-02	1
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	3.65E+01	0.00E+00	1.61E-01	1.61E-01	1
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	5.96E-01	0.00E+00	2.62E-03	2.62E-03	1
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	1.23E+01	0.00E+00	5.41E-02	5.41E-02	1
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	5.09E+00	0.00E+00	2.24E-02	2.24E-02	1
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	2.39E+01	0.00E+00	1.05E-01	1.05E-01	1
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	3.52E+01	0.00E+00	1.55E-01	1.55E-01	1
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	5.00E+01	0.00E+00	2.20E-01	2.20E-01	1
331	5.493	13.630	10	0.00E+00	0.00E+00	0.00E+00	3.60E-01	0.00E+00	1.58E-03	1.58E-03	1
334	5.691	13.943	10	5.65E+01	0.00E+00	5.65E+01	2.81E+02	0.00E+00	1.24E+00	5.77E+01	7
335	5.690	14.073	10	8.94E+01	0.00E+00	8.94E+01	2.55E+02	0.00E+00	1.12E+00	9.05E+01	8
336	5.654	14.156	10	1.06E+02	0.00E+00	1.06E+02	1.64E+02	0.00E+00	7.22E-01	1.07E+02	8
337	5.627	13.811	10	6.18E+00	0.00E+00	6.18E+00	2.62E+02	0.00E+00	1.15E+00	7.33E+00	4
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	8.88E-02	0.00E+00	3.91E-04	3.91E-04	1
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	7.28E+01	0.00E+00	3.20E-01	3.20E-01	2
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	9.06E+01	0.00E+00	3.99E-01	3.99E-01	2
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	7.06E+01	0.00E+00	3.11E-01	3.11E-01	2
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	8.76E+01	0.00E+00	3.85E-01	3.85E-01	2
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	9.96E+01	0.00E+00	4.38E-01	4.38E-01	2
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.15E+02	0.00E+00	5.06E-01	5.06E-01	2
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	1.04E+02	0.00E+00	4.58E-01	4.58E-01	2
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.15E+02	0.00E+00	5.06E-01	5.06E-01	2
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	1.84E+02	0.00E+00	8.10E-01	8.10E-01	2
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	1.59E+02	0.00E+00	7.00E-01	7.00E-01	2
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	1.40E+02	0.00E+00	6.16E-01	6.16E-01	2
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	2.89E+02	0.00E+00	1.27E+00	1.27E+00	2
361	6.165	13.823	10	1.01E+01	0.00E+00	1.01E+01	2.25E+02	0.00E+00	9.90E-01	1.11E+01	4
362	6.119	13.900	10	3.45E+01	0.00E+00	3.45E+01	2.87E+02	0.00E+00	1.26E+00	3.58E+01	6
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	2.75E+01	0.00E+00	1.21E-01	1.21E-01	1
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	3.29E+01	0.00E+00	1.45E-01	1.45E-01	1
442	5.998	14.225	8	9.83E+01	0.00E+00	9.83E+01	1.56E+02	0.00E+00	6.86E-01	9.90E+01	8
443	5.724	13.641	8	0.00E+00	0.00E+00	0.00E+00	2.34E+02	0.00E+00	1.03E+00	1.03E+00	2
444	5.772	13.525	8	0.00E+00	0.00E+00	0.00E+00	1.94E+02	0.00E+00	8.54E-01	8.54E-01	2
445	5.724	13.585	8	0.00E+00	0.00E+00	0.00E+00	2.12E+02	0.00E+00	9.33E-01	9.33E-01	2
446	5.932	13.871	8	3.89E+01	0.00E+00	3.89E+01	2.98E+02	0.00E+00	1.31E+00	4.02E+01	6
447	5.920	13.941	8	6.49E+01	0.00E+00	6.49E+01	2.95E+02	0.00E+00	1.30E+00	6.62E+01	7
448	5.927	13.817	8	7.29E+00	0.00E+00	7.29E+00	2.83E+02	0.00E+00	1.25E+00	8.54E+00	4

Sarin (GB) 250kg TBM

Light Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				1 round at aimpoint (5.80, 16.40)							
1	6.093	14.476	10	3.16E+00	0.00E+00	3.16E+00	3.16E+00	0.00E+00	1.39E-02	3.17E+00	3
2	6.092	14.323	10	3.29E+00	0.00E+00	3.29E+00	3.29E+00	0.00E+00	1.45E-02	3.30E+00	3
3	6.056	14.272	10	5.92E+00	0.00E+00	5.92E+00	5.92E+00	0.00E+00	2.60E-02	5.95E+00	3
4	5.928	14.340	10	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
5	5.996	14.233	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
6	5.940	14.453	10	1.76E+01	0.00E+00	1.76E+01	1.76E+01	0.00E+00	7.74E-02	1.77E+01	5
10	5.849	14.797	10	2.90E+01	0.00E+00	2.90E+01	2.90E+01	0.00E+00	1.28E-01	2.91E+01	5
11	5.840	14.745	10	2.63E+01	0.00E+00	2.63E+01	2.63E+01	0.00E+00	1.16E-01	2.64E+01	5

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

12	5.853	14.870	10	3.76E+01	0.00E+00	3.76E+01	3.76E+01	0.00E+00	1.65E-01	3.78E+01	6
97	5.610	14.388	10	2.68E-01	0.00E+00	2.68E-01	2.68E-01	0.00E+00	1.18E-03	2.69E-01	2
99	5.616	14.500	10	3.67E-01	0.00E+00	3.67E-01	3.67E-01	0.00E+00	1.61E-03	3.69E-01	2
100	5.667	14.564	10	4.38E+00	0.00E+00	4.38E+00	4.38E+00	0.00E+00	1.93E-02	4.40E+00	3
106	5.642	13.947	10	2.47E+00	0.00E+00	2.47E+00	2.47E+00	0.00E+00	1.09E-02	2.48E+00	2
107	5.653	13.814	10	3.32E+00	0.00E+00	3.32E+00	3.32E+00	0.00E+00	1.46E-02	3.33E+00	3
108	5.627	14.130	10	1.51E+00	0.00E+00	1.51E+00	1.51E+00	0.00E+00	6.64E-03	1.52E+00	2
109	5.702	14.036	10	6.89E+00	0.00E+00	6.89E+00	6.89E+00	0.00E+00	3.03E-02	6.92E+00	4
112	5.875	12.255	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
120	6.033	14.438	10	8.45E+00	0.00E+00	8.45E+00	8.45E+00	0.00E+00	3.72E-02	8.49E+00	4
121	6.032	12.989	10	2.47E+00	0.00E+00	2.47E+00	2.47E+00	0.00E+00	1.09E-02	2.48E+00	2
122	5.929	12.964	10	5.58E+00	0.00E+00	5.58E+00	5.58E+00	0.00E+00	2.46E-02	5.60E+00	3
123	6.033	12.883	10	1.75E+00	0.00E+00	1.75E+00	1.75E+00	0.00E+00	7.70E-03	1.76E+00	2
124	5.934	12.874	10	4.77E+00	0.00E+00	4.77E+00	4.77E+00	0.00E+00	2.10E-02	4.79E+00	3
125	5.888	13.090	10	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.72E-02	1.31E+01	4
126	5.793	13.170	10	6.14E+00	0.00E+00	6.14E+00	6.14E+00	0.00E+00	2.70E-02	6.17E+00	4
127	5.789	13.080	10	5.38E+00	0.00E+00	5.38E+00	5.38E+00	0.00E+00	2.37E-02	5.40E+00	3
128	5.929	13.162	10	6.63E+00	0.00E+00	6.63E+00	6.63E+00	0.00E+00	2.92E-02	6.66E+00	4
129	6.018	13.474	10	5.71E+00	0.00E+00	5.71E+00	5.71E+00	0.00E+00	2.51E-02	5.74E+00	3
130	6.010	13.396	10	5.81E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00	2.56E-02	5.84E+00	3
131	6.016	13.310	10	5.14E+00	0.00E+00	5.14E+00	5.14E+00	0.00E+00	2.26E-02	5.16E+00	3
132	6.074	13.908	10	4.39E+00	0.00E+00	4.39E+00	4.39E+00	0.00E+00	1.93E-02	4.41E+00	3
133	6.062	13.731	10	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
134	6.072	13.821	10	4.02E+00	0.00E+00	4.02E+00	4.02E+00	0.00E+00	1.77E-02	4.04E+00	3
190	5.817	12.688	7	3.87E+00	0.00E+00	3.87E+00	3.87E+00	0.00E+00	1.70E-02	3.89E+00	3
191	5.850	12.720	7	4.69E+00	0.00E+00	4.69E+00	4.69E+00	0.00E+00	2.06E-02	4.71E+00	3
210	5.928	14.339	8	1.69E+01	0.00E+00	1.69E+01	1.69E+01	0.00E+00	7.44E-02	1.70E+01	5
211	5.764	13.557	8	7.74E+00	0.00E+00	7.74E+00	7.74E+00	0.00E+00	3.41E-02	7.77E+00	4
212	5.766	13.622	8	8.15E+00	0.00E+00	8.15E+00	8.15E+00	0.00E+00	3.59E-02	8.19E+00	4
213	5.767	13.674	8	8.47E+00	0.00E+00	8.47E+00	8.47E+00	0.00E+00	3.73E-02	8.51E+00	4
214	5.958	13.839	8	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
215	5.913	13.903	8	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.46E-02	1.25E+01	4
216	5.912	13.851	8	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
231	5.991	14.398	10	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
232	6.000	14.484	10	1.22E+01	0.00E+00	1.22E+01	1.22E+01	0.00E+00	5.37E-02	1.23E+01	4
233	6.059	14.191	10	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.52E-02	5.75E+00	3
234	6.048	14.352	10	6.81E+00	0.00E+00	6.81E+00	6.81E+00	0.00E+00	3.00E-02	6.84E+00	4
235	5.928	14.253	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
236	5.995	14.318	10	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
240	5.917	14.848	10	2.80E+01	0.00E+00	2.80E+01	2.80E+01	0.00E+00	1.23E-01	2.81E+01	5
241	5.911	14.774	10	2.65E+01	0.00E+00	2.65E+01	2.65E+01	0.00E+00	1.17E-01	2.66E+01	5
242	5.917	14.700	10	2.41E+01	0.00E+00	2.41E+01	2.41E+01	0.00E+00	1.06E-01	2.42E+01	5
325	5.702	14.442	10	7.91E+00	0.00E+00	7.91E+00	7.91E+00	0.00E+00	3.48E-02	7.94E+00	4
326	5.689	14.515	10	6.75E+00	0.00E+00	6.75E+00	6.75E+00	0.00E+00	2.97E-02	6.78E+00	4
328	5.636	14.371	10	1.94E+00	0.00E+00	1.94E+00	1.94E+00	0.00E+00	8.54E-03	1.95E+00	2
334	5.691	13.943	10	5.80E+00	0.00E+00	5.80E+00	5.80E+00	0.00E+00	2.55E-02	5.83E+00	3
335	5.690	14.073	10	6.29E+00	0.00E+00	6.29E+00	6.29E+00	0.00E+00	2.77E-02	6.32E+00	4
336	5.654	14.156	10	3.62E+00	0.00E+00	3.62E+00	3.62E+00	0.00E+00	1.59E-02	3.64E+00	3
337	5.627	13.811	10	8.45E-01	0.00E+00	8.45E-01	8.45E-01	0.00E+00	3.72E-03	8.49E-01	2
338	5.888	12.262	10	5.74E+00	0.00E+00	5.74E+00	5.74E+00	0.00E+00	2.53E-02	5.77E+00	3
348	6.048	14.515	10	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
349	6.052	12.911	10	7.18E-01	0.00E+00	7.18E-01	7.18E-01	0.00E+00	3.16E-03	7.21E-01	2
350	6.039	13.007	10	2.52E+00	0.00E+00	2.52E+00	2.52E+00	0.00E+00	1.11E-02	2.53E+00	2
351	5.955	12.889	10	4.74E+00	0.00E+00	4.74E+00	4.74E+00	0.00E+00	2.09E-02	4.76E+00	3
352	5.960	12.980	10	5.08E+00	0.00E+00	5.08E+00	5.08E+00	0.00E+00	2.24E-02	5.10E+00	3
353	5.884	13.058	10	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
354	5.911	13.172	10	6.82E+00	0.00E+00	6.82E+00	6.82E+00	0.00E+00	3.00E-02	6.85E+00	4
355	5.823	13.093	10	6.73E+00	0.00E+00	6.73E+00	6.73E+00	0.00E+00	2.96E-02	6.76E+00	4
356	5.820	13.172	10	6.68E+00	0.00E+00	6.68E+00	6.68E+00	0.00E+00	2.94E-02	6.71E+00	4
357	6.039	13.482	10	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.09E-02	4.78E+00	3
358	6.038	13.406	10	4.63E+00	0.00E+00	4.63E+00	4.63E+00	0.00E+00	2.04E-02	4.65E+00	3
359	6.041	13.323	10	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
362	6.119	13.900	10	6.17E-01	0.00E+00	6.17E-01	6.17E-01	0.00E+00	2.71E-03	6.20E-01	2
416	5.798	12.686	7	3.73E+00	0.00E+00	3.73E+00	3.73E+00	0.00E+00	1.64E-02	3.75E+00	3
417	5.881	12.714	7	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
442	5.998	14.225	8	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4
443	5.724	13.641	8	6.66E+00	0.00E+00	6.66E+00	6.66E+00	0.00E+00	2.93E-02	6.69E+00	4
444	5.772	13.525	8	7.96E+00	0.00E+00	7.96E+00	7.96E+00	0.00E+00	3.50E-02	8.00E+00	4
445	5.724	13.585	8	6.38E+00	0.00E+00	6.38E+00	6.38E+00	0.00E+00	2.81E-02	6.41E+00	4
446	5.932	13.871	8	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
447	5.920	13.941	8	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
448	5.927	13.817	8	1.09E+01	0.00E+00	1.09E+01	1.09E+01	0.00E+00	4.80E-02	1.09E+01	4

Case 2: Protected **1 round at aipoint (6.00, 13.00)**

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	1.66E+01	0.00E+00	7.30E-02	7.30E-02	1
121	6.032	12.989	10	5.33E+00	0.00E+00	5.33E+00	5.39E+00	0.00E+00	2.37E-02	5.35E+00	3
123	6.033	12.883	10	1.64E+01	0.00E+00	1.64E+01	4.18E+01	0.00E+00	1.84E-01	1.66E+01	5
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	5.26E+01	0.00E+00	2.31E-01	2.31E-01	1
349	6.052	12.911	10	7.72E+02	0.00E+00	7.72E+02	8.43E+02	0.00E+00	3.71E+00	7.76E+02	8
350	6.039	13.007	10	7.03E+00	0.00E+00	7.03E+00	7.17E+00	0.00E+00	3.15E-02	7.06E+00	4

Sarin (GB) 500kg TBM
Moderate Attack
Height of Release: 0m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (5.30, 17.50)											
1	6.093	14.476	10	4.42E+00	0.00E+00	4.42E+00	4.42E+00	0.00E+00	1.94E-02	4.44E+00	3
2	6.092	14.323	10	4.56E+00	0.00E+00	4.56E+00	4.56E+00	0.00E+00	2.01E-02	4.58E+00	3
3	6.056	14.272	10	5.75E+00	0.00E+00	5.75E+00	5.75E+00	0.00E+00	2.53E-02	5.78E+00	3
4	5.928	14.340	10	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
5	5.996	14.233	10	8.52E+00	0.00E+00	8.52E+00	8.52E+00	0.00E+00	3.75E-02	8.56E+00	4
6	5.940	14.453	10	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
10	5.849	14.797	10	1.84E+01	0.00E+00	1.84E+01	1.84E+01	0.00E+00	8.10E-02	1.85E+01	5
11	5.840	14.745	10	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
12	5.853	14.870	10	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
35	5.984	15.987	10	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
36	6.098	15.997	10	5.35E-02	0.00E+00	5.35E-02	5.35E-02	0.00E+00	2.35E-04	5.37E-02	1
40	5.550	13.245	10	6.24E+00	0.00E+00	6.24E+00	6.24E+00	0.00E+00	2.75E-02	6.27E+00	4
41	5.474	13.201	10	6.16E+00	0.00E+00	6.16E+00	6.16E+00	0.00E+00	2.71E-02	6.19E+00	4
42	5.507	13.288	10	6.29E+00	0.00E+00	6.29E+00	6.29E+00	0.00E+00	2.77E-02	6.32E+00	4
67	5.560	12.798	10	4.76E+00	0.00E+00	4.76E+00	4.76E+00	0.00E+00	2.09E-02	4.78E+00	3
68	5.483	12.959	10	5.66E+00	0.00E+00	5.66E+00	5.66E+00	0.00E+00	2.49E-02	5.68E+00	3
69	5.563	12.908	10	5.28E+00	0.00E+00	5.28E+00	5.28E+00	0.00E+00	2.32E-02	5.30E+00	3
70	5.463	12.826	10	5.19E+00	0.00E+00	5.19E+00	5.19E+00	0.00E+00	2.28E-02	5.21E+00	3
71	5.648	12.900	10	6.25E+00	0.00E+00	6.25E+00	6.25E+00	0.00E+00	2.75E-02	6.28E+00	4
72	5.451	12.890	10	5.34E+00	0.00E+00	5.34E+00	5.34E+00	0.00E+00	2.35E-02	5.36E+00	3
73	5.605	10.601	10	6.83E-01	0.00E+00	6.83E-01	6.83E-01	0.00E+00	3.01E-03	6.86E-01	2
76	5.720	11.676	10	4.30E+00	0.00E+00	4.30E+00	4.30E+00	0.00E+00	1.89E-02	4.32E+00	3
77	5.601	11.699	10	3.22E+00	0.00E+00	3.22E+00	3.22E+00	0.00E+00	1.42E-02	3.23E+00	3
78	5.331	11.805	10	3.25E+00	0.00E+00	3.25E+00	3.25E+00	0.00E+00	1.43E-02	3.26E+00	3
79	5.184	11.887	10	3.94E+00	0.00E+00	3.94E+00	3.94E+00	0.00E+00	1.73E-02	3.96E+00	3
81	5.121	11.999	10	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3
92	4.925	15.009	10	6.43E+00	0.00E+00	6.43E+00	6.43E+00	0.00E+00	2.83E-02	6.46E+00	4
93	5.004	15.122	10	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
94	5.423	15.512	10	6.48E+00	0.00E+00	6.48E+00	6.48E+00	0.00E+00	2.85E-02	6.51E+00	4
95	5.601	15.674	10	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
96	5.747	15.847	10	8.05E+01	0.00E+00	8.05E+01	8.05E+01	0.00E+00	3.54E-01	8.09E+01	8
97	5.610	14.388	10	9.19E+00	0.00E+00	9.19E+00	9.19E+00	0.00E+00	4.04E-02	9.23E+00	4
98	5.554	14.447	10	8.20E+00	0.00E+00	8.20E+00	8.20E+00	0.00E+00	3.61E-02	8.24E+00	4
99	5.616	14.500	10	9.81E+00	0.00E+00	9.81E+00	9.81E+00	0.00E+00	4.32E-02	9.85E+00	4
100	5.667	14.564	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
101	5.392	13.905	10	7.00E+00	0.00E+00	7.00E+00	7.00E+00	0.00E+00	3.08E-02	7.03E+00	4
102	5.474	13.777	10	6.91E+00	0.00E+00	6.91E+00	6.91E+00	0.00E+00	3.04E-02	6.94E+00	4
103	5.406	13.666	10	6.26E+00	0.00E+00	6.26E+00	6.26E+00	0.00E+00	2.75E-02	6.29E+00	4
104	5.461	13.842	10	7.10E+00	0.00E+00	7.10E+00	7.10E+00	0.00E+00	3.12E-02	7.13E+00	4
105	5.476	13.706	10	6.67E+00	0.00E+00	6.67E+00	6.67E+00	0.00E+00	2.93E-02	6.70E+00	4
106	5.642	13.947	10	9.08E+00	0.00E+00	9.08E+00	9.08E+00	0.00E+00	4.00E-02	9.12E+00	4
107	5.653	13.814	10	8.93E+00	0.00E+00	8.93E+00	8.93E+00	0.00E+00	3.93E-02	8.97E+00	4
108	5.627	14.130	10	9.27E+00	0.00E+00	9.27E+00	9.27E+00	0.00E+00	4.08E-02	9.31E+00	4
109	5.702	14.036	10	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
110	5.702	12.379	10	5.67E+00	0.00E+00	5.67E+00	5.67E+00	0.00E+00	2.49E-02	5.69E+00	3
111	5.784	12.296	10	5.77E+00	0.00E+00	5.77E+00	5.77E+00	0.00E+00	2.54E-02	5.80E+00	3
112	5.875	12.255	10	5.52E+00	0.00E+00	5.52E+00	5.52E+00	0.00E+00	2.43E-02	5.54E+00	3
113	5.966	12.148	10	4.41E+00	0.00E+00	4.41E+00	4.41E+00	0.00E+00	1.94E-02	4.43E+00	3
120	6.033	14.438	10	7.11E+00	0.00E+00	7.11E+00	7.11E+00	0.00E+00	3.13E-02	7.14E+00	4
121	6.032	12.989	10	4.79E+00	0.00E+00	4.79E+00	4.79E+00	0.00E+00	2.11E-02	4.81E+00	3
122	5.929	12.964	10	6.67E+00	0.00E+00	6.67E+00	6.67E+00	0.00E+00	2.93E-02	6.70E+00	4
123	6.033	12.883	10	4.62E+00	0.00E+00	4.62E+00	4.62E+00	0.00E+00	2.03E-02	4.64E+00	3
124	5.934	12.874	10	6.36E+00	0.00E+00	6.36E+00	6.36E+00	0.00E+00	2.80E-02	6.39E+00	4
125	5.888	13.090	10	7.67E+00	0.00E+00	7.67E+00	7.67E+00	0.00E+00	3.37E-02	7.70E+00	4
126	5.793	13.170	10	8.39E+00	0.00E+00	8.39E+00	8.39E+00	0.00E+00	3.69E-02	8.43E+00	4
127	5.789	13.080	10	8.08E+00	0.00E+00	8.08E+00	8.08E+00	0.00E+00	3.56E-02	8.12E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

128	5.929	13.162	10	7.21E+00	0.00E+00	7.21E+00	7.21E+00	0.00E+00	3.17E-02	7.24E+00	4
129	6.018	13.474	10	6.03E+00	0.00E+00	6.03E+00	6.03E+00	0.00E+00	2.65E-02	6.06E+00	4
130	6.010	13.396	10	6.13E+00	0.00E+00	6.13E+00	6.13E+00	0.00E+00	2.70E-02	6.16E+00	4
131	6.016	13.310	10	5.86E+00	0.00E+00	5.86E+00	5.86E+00	0.00E+00	2.58E-02	5.89E+00	3
132	6.074	13.908	10	5.08E+00	0.00E+00	5.08E+00	5.08E+00	0.00E+00	2.24E-02	5.10E+00	3
133	6.062	13.731	10	5.07E+00	0.00E+00	5.07E+00	5.07E+00	0.00E+00	2.23E-02	5.09E+00	3
134	6.072	13.821	10	4.95E+00	0.00E+00	4.95E+00	4.95E+00	0.00E+00	2.18E-02	4.97E+00	3
189	5.211	12.855	7	6.37E+00	0.00E+00	6.37E+00	6.37E+00	0.00E+00	2.80E-02	6.40E+00	4
190	5.817	12.688	7	6.93E+00	0.00E+00	6.93E+00	6.93E+00	0.00E+00	3.05E-02	6.96E+00	4
191	5.850	12.720	7	6.95E+00	0.00E+00	6.95E+00	6.95E+00	0.00E+00	3.06E-02	6.98E+00	4
192	5.199	13.137	7	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
193	5.224	13.195	7	7.06E+00	0.00E+00	7.06E+00	7.06E+00	0.00E+00	3.11E-02	7.09E+00	4
194	5.504	12.164	7	3.30E+00	0.00E+00	3.30E+00	3.30E+00	0.00E+00	1.45E-02	3.31E+00	3
195	5.583	12.163	7	3.75E+00	0.00E+00	3.75E+00	3.75E+00	0.00E+00	1.65E-02	3.77E+00	3
196	4.968	13.187	7	5.02E+00	0.00E+00	5.02E+00	5.02E+00	0.00E+00	2.21E-02	5.04E+00	3
197	5.033	13.123	7	6.02E+00	0.00E+00	6.02E+00	6.02E+00	0.00E+00	2.65E-02	6.05E+00	4
198	5.102	14.383	7	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
199	5.115	14.389	7	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
210	5.928	14.339	8	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
211	5.764	13.557	8	9.80E+00	0.00E+00	9.80E+00	9.80E+00	0.00E+00	4.31E-02	9.84E+00	4
212	5.766	13.622	8	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
213	5.767	13.674	8	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
214	5.958	13.839	8	8.61E+00	0.00E+00	8.61E+00	8.61E+00	0.00E+00	3.79E-02	8.65E+00	4
215	5.913	13.903	8	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
216	5.912	13.851	8	9.96E+00	0.00E+00	9.96E+00	9.96E+00	0.00E+00	4.38E-02	1.00E+01	4
231	5.991	14.398	10	9.04E+00	0.00E+00	9.04E+00	9.04E+00	0.00E+00	3.98E-02	9.08E+00	4
232	6.000	14.484	10	8.71E+00	0.00E+00	8.71E+00	8.71E+00	0.00E+00	3.83E-02	8.75E+00	4
233	6.059	14.191	10	5.63E+00	0.00E+00	5.63E+00	5.63E+00	0.00E+00	2.48E-02	5.65E+00	3
234	6.048	14.352	10	6.19E+00	0.00E+00	6.19E+00	6.19E+00	0.00E+00	2.72E-02	6.22E+00	4
235	5.928	14.253	10	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
236	5.995	14.318	10	8.70E+00	0.00E+00	8.70E+00	8.70E+00	0.00E+00	3.83E-02	8.74E+00	4
240	5.917	14.848	10	1.54E+01	0.00E+00	1.54E+01	1.54E+01	0.00E+00	6.78E-02	1.55E+01	5
241	5.911	14.774	10	1.52E+01	0.00E+00	1.52E+01	1.52E+01	0.00E+00	6.69E-02	1.53E+01	5
242	5.917	14.700	10	1.42E+01	0.00E+00	1.42E+01	1.42E+01	0.00E+00	6.25E-02	1.43E+01	4
264	6.044	15.980	10	2.07E+00	0.00E+00	2.07E+00	2.07E+00	0.00E+00	9.11E-03	2.08E+00	2
269	5.451	13.254	10	5.98E+00	0.00E+00	5.98E+00	5.98E+00	0.00E+00	2.63E-02	6.01E+00	4
270	5.514	13.209	10	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.74E-02	6.26E+00	4
271	5.566	13.193	10	6.06E+00	0.00E+00	6.06E+00	6.06E+00	0.00E+00	2.67E-02	6.09E+00	4
295	5.413	12.882	10	4.66E+00	0.00E+00	4.66E+00	4.66E+00	0.00E+00	2.05E-02	4.68E+00	3
296	5.537	12.816	10	4.88E+00	0.00E+00	4.88E+00	4.88E+00	0.00E+00	2.15E-02	4.90E+00	3
297	5.496	12.799	10	5.16E+00	0.00E+00	5.16E+00	5.16E+00	0.00E+00	2.27E-02	5.18E+00	3
298	5.561	12.909	10	5.28E+00	0.00E+00	5.28E+00	5.28E+00	0.00E+00	2.32E-02	5.30E+00	3
299	5.615	12.839	10	5.52E+00	0.00E+00	5.52E+00	5.52E+00	0.00E+00	2.43E-02	5.54E+00	3
300	5.608	12.984	10	5.65E+00	0.00E+00	5.65E+00	5.65E+00	0.00E+00	2.49E-02	5.67E+00	3
304	5.755	11.682	10	4.42E+00	0.00E+00	4.42E+00	4.42E+00	0.00E+00	1.94E-02	4.44E+00	3
305	5.635	11.734	10	3.68E+00	0.00E+00	3.68E+00	3.68E+00	0.00E+00	1.62E-02	3.70E+00	3
306	5.353	11.802	10	3.07E+00	0.00E+00	3.07E+00	3.07E+00	0.00E+00	1.35E-02	3.08E+00	3
307	5.207	11.849	10	3.88E+00	0.00E+00	3.88E+00	3.88E+00	0.00E+00	1.71E-02	3.90E+00	3
308	4.846	12.296	10	1.10E+00	0.00E+00	1.10E+00	1.10E+00	0.00E+00	4.84E-03	1.10E+00	2
309	5.181	11.974	10	4.16E+00	0.00E+00	4.16E+00	4.16E+00	0.00E+00	1.83E-02	4.18E+00	3
319	4.779	14.681	10	7.77E-01	0.00E+00	7.77E-01	7.77E-01	0.00E+00	3.42E-03	7.80E-01	2
320	4.990	15.031	10	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
321	5.097	15.098	10	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5
322	5.324	15.511	10	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
323	5.639	15.789	10	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
324	5.484	15.661	10	2.97E+00	0.00E+00	2.97E+00	2.97E+00	0.00E+00	1.31E-02	2.98E+00	2
325	5.702	14.442	10	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
326	5.689	14.515	10	1.35E+01	0.00E+00	1.35E+01	1.35E+01	0.00E+00	5.94E-02	1.36E+01	4
327	5.512	14.539	10	7.52E+00	0.00E+00	7.52E+00	7.52E+00	0.00E+00	3.31E-02	7.55E+00	4
328	5.636	14.371	10	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
329	5.419	13.723	10	6.44E+00	0.00E+00	6.44E+00	6.44E+00	0.00E+00	2.83E-02	6.47E+00	4
330	5.408	13.795	10	6.63E+00	0.00E+00	6.63E+00	6.63E+00	0.00E+00	2.92E-02	6.66E+00	4
331	5.493	13.630	10	6.79E+00	0.00E+00	6.79E+00	6.79E+00	0.00E+00	2.99E-02	6.82E+00	4
332	5.361	13.699	10	6.54E+00	0.00E+00	6.54E+00	6.54E+00	0.00E+00	2.88E-02	6.57E+00	4
333	5.363	13.843	10	7.07E+00	0.00E+00	7.07E+00	7.07E+00	0.00E+00	3.11E-02	7.10E+00	4
334	5.691	13.943	10	1.05E+01	0.00E+00	1.05E+01	1.05E+01	0.00E+00	4.62E-02	1.05E+01	4
335	5.690	14.073	10	1.10E+01	0.00E+00	1.10E+01	1.10E+01	0.00E+00	4.84E-02	1.10E+01	4
336	5.654	14.156	10	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
337	5.627	13.811	10	8.18E+00	0.00E+00	8.18E+00	8.18E+00	0.00E+00	3.60E-02	8.22E+00	4
338	5.888	12.262	10	5.47E+00	0.00E+00	5.47E+00	5.47E+00	0.00E+00	2.41E-02	5.49E+00	3
339	5.993	12.248	10	4.17E+00	0.00E+00	4.17E+00	4.17E+00	0.00E+00	1.83E-02	4.19E+00	3
340	5.752	12.293	10	5.72E+00	0.00E+00	5.72E+00	5.72E+00	0.00E+00	2.52E-02	5.75E+00	3
341	5.706	12.340	10	5.61E+00	0.00E+00	5.61E+00	5.61E+00	0.00E+00	2.47E-02	5.63E+00	3

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

348	6.048	14.515	10	6.56E+00	0.00E+00	6.56E+00	6.56E+00	0.00E+00	2.89E-02	6.59E+00	4
349	6.052	12.911	10	4.27E+00	0.00E+00	4.27E+00	4.27E+00	0.00E+00	1.88E-02	4.29E+00	3
350	6.039	13.007	10	4.67E+00	0.00E+00	4.67E+00	4.67E+00	0.00E+00	2.05E-02	4.69E+00	3
351	5.955	12.889	10	6.13E+00	0.00E+00	6.13E+00	6.13E+00	0.00E+00	2.70E-02	6.16E+00	4
352	5.960	12.980	10	6.23E+00	0.00E+00	6.23E+00	6.23E+00	0.00E+00	2.74E-02	6.26E+00	4
353	5.884	13.058	10	7.58E+00	0.00E+00	7.58E+00	7.58E+00	0.00E+00	3.34E-02	7.61E+00	4
354	5.911	13.172	10	7.54E+00	0.00E+00	7.54E+00	7.54E+00	0.00E+00	3.32E-02	7.57E+00	4
355	5.823	13.093	10	8.08E+00	0.00E+00	8.08E+00	8.08E+00	0.00E+00	3.56E-02	8.12E+00	4
356	5.820	13.172	10	8.35E+00	0.00E+00	8.35E+00	8.35E+00	0.00E+00	3.67E-02	8.39E+00	4
357	6.039	13.482	10	5.58E+00	0.00E+00	5.58E+00	5.58E+00	0.00E+00	2.46E-02	5.60E+00	3
358	6.038	13.406	10	5.43E+00	0.00E+00	5.43E+00	5.43E+00	0.00E+00	2.39E-02	5.45E+00	3
359	6.041	13.323	10	5.15E+00	0.00E+00	5.15E+00	5.15E+00	0.00E+00	2.27E-02	5.17E+00	3
360	6.145	13.753	10	2.47E+00	0.00E+00	2.47E+00	2.47E+00	0.00E+00	1.09E-02	2.48E+00	2
361	6.165	13.823	10	1.88E+00	0.00E+00	1.88E+00	1.88E+00	0.00E+00	8.27E-03	1.89E+00	2
362	6.119	13.900	10	3.53E+00	0.00E+00	3.53E+00	3.53E+00	0.00E+00	1.55E-02	3.55E+00	3
416	5.798	12.686	7	6.95E+00	0.00E+00	6.95E+00	6.95E+00	0.00E+00	3.06E-02	6.98E+00	4
417	5.881	12.714	7	6.56E+00	0.00E+00	6.56E+00	6.56E+00	0.00E+00	2.89E-02	6.59E+00	4
418	5.228	13.115	7	6.72E+00	0.00E+00	6.72E+00	6.72E+00	0.00E+00	2.96E-02	6.75E+00	4
419	5.264	13.099	7	6.46E+00	0.00E+00	6.46E+00	6.46E+00	0.00E+00	2.84E-02	6.49E+00	4
420	5.601	12.207	7	4.05E+00	0.00E+00	4.05E+00	4.05E+00	0.00E+00	1.78E-02	4.07E+00	3
421	5.517	12.227	7	3.41E+00	0.00E+00	3.41E+00	3.41E+00	0.00E+00	1.50E-02	3.43E+00	3
422	4.992	13.086	7	5.38E+00	0.00E+00	5.38E+00	5.38E+00	0.00E+00	2.37E-02	5.40E+00	3
423	4.962	13.219	7	4.97E+00	0.00E+00	4.97E+00	4.97E+00	0.00E+00	2.19E-02	4.99E+00	3
424	5.069	14.379	7	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
425	5.100	14.393	7	1.16E+01	0.00E+00	1.16E+01	1.16E+01	0.00E+00	5.10E-02	1.17E+01	4
439	5.211	12.851	8	6.36E+00	0.00E+00	6.36E+00	6.36E+00	0.00E+00	2.80E-02	6.39E+00	4
442	5.998	14.225	8	8.44E+00	0.00E+00	8.44E+00	8.44E+00	0.00E+00	3.71E-02	8.48E+00	4
443	5.724	13.641	8	9.69E+00	0.00E+00	9.69E+00	9.69E+00	0.00E+00	4.26E-02	9.73E+00	4
444	5.772	13.525	8	9.68E+00	0.00E+00	9.68E+00	9.68E+00	0.00E+00	4.26E-02	9.72E+00	4
445	5.724	13.585	8	9.50E+00	0.00E+00	9.50E+00	9.50E+00	0.00E+00	4.18E-02	9.54E+00	4
446	5.932	13.871	8	9.49E+00	0.00E+00	9.49E+00	9.49E+00	0.00E+00	4.18E-02	9.53E+00	4
447	5.920	13.941	8	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
448	5.927	13.817	8	9.39E+00	0.00E+00	9.39E+00	9.39E+00	0.00E+00	4.13E-02	9.43E+00	4

Case 2: Protected 2 rounds at aimpoint (4.90, 12.10)

73	5.605	10.601	10	0.00E+00	0.00E+00	0.00E+00	1.45E+00	0.00E+00	6.38E-03	6.38E-03	1
82	4.782	12.418	10	1.59E+00	0.00E+00	1.59E+00	1.59E+00	0.00E+00	7.00E-03	1.60E+00	2
306	5.353	11.802	10	1.86E+01	0.00E+00	1.86E+01	4.72E+02	0.00E+00	2.08E+00	2.07E+01	5
308	4.846	12.296	10	4.12E-02	0.00E+00	4.12E-02	1.07E+01	0.00E+00	4.71E-02	8.83E-02	1
310	4.753	12.292	10	3.10E-02	0.00E+00	3.10E-02	5.92E+01	0.00E+00	2.60E-01	2.91E-01	2

Sarin (GB) 500kg TBM

Heavy Attack

Height of Release: 0m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total		Injury Severity Category
				Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	

Case 1: Unprotected 4 rounds at aimpoint (5.30, 18.00)

1	6.093	14.476	10	6.06E+00	0.00E+00	6.06E+00	6.06E+00	0.00E+00	2.67E-02	6.09E+00	4
2	6.092	14.323	10	6.12E+00	0.00E+00	6.12E+00	6.12E+00	0.00E+00	2.69E-02	6.15E+00	4
3	6.056	14.272	10	7.85E+00	0.00E+00	7.85E+00	7.85E+00	0.00E+00	3.45E-02	7.88E+00	4
4	5.928	14.340	10	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
5	5.996	14.233	10	1.14E+01	0.00E+00	1.14E+01	1.14E+01	0.00E+00	5.02E-02	1.15E+01	4
6	5.940	14.453	10	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
10	5.849	14.797	10	2.46E+01	0.00E+00	2.46E+01	2.46E+01	0.00E+00	1.08E-01	2.47E+01	5
11	5.840	14.745	10	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
12	5.853	14.870	10	2.54E+01	0.00E+00	2.54E+01	2.54E+01	0.00E+00	1.12E-01	2.55E+01	5
34	6.177	16.004	10	1.82E-01	0.00E+00	1.82E-01	1.82E-01	0.00E+00	8.01E-04	1.83E-01	1
35	5.984	15.987	10	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
36	6.098	15.997	10	1.82E+00	0.00E+00	1.82E+00	1.82E+00	0.00E+00	8.01E-03	1.83E+00	2
40	5.550	13.245	10	1.73E+01	0.00E+00	1.73E+01	1.73E+01	0.00E+00	7.61E-02	1.74E+01	5
41	5.474	13.201	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
42	5.507	13.288	10	1.68E+01	0.00E+00	1.68E+01	1.68E+01	0.00E+00	7.39E-02	1.69E+01	5
67	5.560	12.798	10	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
68	5.483	12.959	10	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
69	5.563	12.908	10	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
70	5.463	12.826	10	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
71	5.648	12.900	10	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
72	5.451	12.890	10	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
73	5.605	10.601	10	6.96E+00	0.00E+00	6.96E+00	6.96E+00	0.00E+00	3.06E-02	6.99E+00	4
75	6.278	11.645	10	2.86E-01	0.00E+00	2.86E-01	2.86E-01	0.00E+00	1.26E-03	2.87E-01	2

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

76	5.720	11.676	10	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
77	5.601	11.699	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
78	5.331	11.805	10	8.03E+00	0.00E+00	8.03E+00	8.03E+00	0.00E+00	3.53E-02	8.07E+00	4
79	5.184	11.887	10	4.87E+00	0.00E+00	4.87E+00	4.87E+00	0.00E+00	2.14E-02	4.89E+00	3
80	6.177	11.646	10	1.89E+00	0.00E+00	1.89E+00	1.89E+00	0.00E+00	8.32E-03	1.90E+00	2
81	5.121	11.999	10	4.31E+00	0.00E+00	4.31E+00	4.31E+00	0.00E+00	1.90E-02	4.33E+00	3
82	4.782	12.418	10	1.52E+00	0.00E+00	1.52E+00	1.52E+00	0.00E+00	6.69E-03	1.53E+00	2
83	4.701	12.596	10	6.25E-01	0.00E+00	6.25E-01	6.25E-01	0.00E+00	2.75E-03	6.28E-01	2
90	4.691	14.480	10	5.48E-01	0.00E+00	5.48E-01	5.48E-01	0.00E+00	2.41E-03	5.50E-01	2
91	4.734	14.632	10	1.11E+00	0.00E+00	1.11E+00	1.11E+00	0.00E+00	4.88E-03	1.11E+00	2
92	4.925	15.009	10	5.26E+00	0.00E+00	5.26E+00	5.26E+00	0.00E+00	2.31E-02	5.28E+00	3
93	5.004	15.122	10	7.75E+00	0.00E+00	7.75E+00	7.75E+00	0.00E+00	3.41E-02	7.78E+00	4
94	5.423	15.512	10	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
95	5.601	15.674	10	7.80E+01	0.00E+00	7.80E+01	7.80E+01	0.00E+00	3.43E-01	7.83E+01	8
96	5.747	15.847	10	9.75E+01	0.00E+00	9.75E+01	9.75E+01	0.00E+00	4.29E-01	9.79E+01	8
97	5.610	14.388	10	2.67E+01	0.00E+00	2.67E+01	2.67E+01	0.00E+00	1.17E-01	2.68E+01	5
98	5.554	14.447	10	2.59E+01	0.00E+00	2.59E+01	2.59E+01	0.00E+00	1.14E-01	2.60E+01	5
99	5.616	14.500	10	2.81E+01	0.00E+00	2.81E+01	2.81E+01	0.00E+00	1.24E-01	2.82E+01	5
100	5.667	14.564	10	2.89E+01	0.00E+00	2.89E+01	2.89E+01	0.00E+00	1.27E-01	2.90E+01	5
101	5.392	13.905	10	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
102	5.474	13.777	10	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
103	5.406	13.666	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
104	5.461	13.842	10	1.82E+01	0.00E+00	1.82E+01	1.82E+01	0.00E+00	8.01E-02	1.83E+01	5
105	5.476	13.706	10	1.80E+01	0.00E+00	1.80E+01	1.80E+01	0.00E+00	7.92E-02	1.81E+01	5
106	5.642	13.947	10	2.27E+01	0.00E+00	2.27E+01	2.27E+01	0.00E+00	9.99E-02	2.28E+01	5
107	5.653	13.814	10	2.16E+01	0.00E+00	2.16E+01	2.16E+01	0.00E+00	9.50E-02	2.17E+01	5
108	5.627	14.130	10	2.43E+01	0.00E+00	2.43E+01	2.43E+01	0.00E+00	1.07E-01	2.44E+01	5
109	5.702	14.036	10	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
110	5.702	12.379	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
111	5.784	12.296	10	1.21E+01	0.00E+00	1.21E+01	1.21E+01	0.00E+00	5.32E-02	1.22E+01	4
112	5.875	12.255	10	1.04E+01	0.00E+00	1.04E+01	1.04E+01	0.00E+00	4.58E-02	1.04E+01	4
113	5.966	12.148	10	8.06E+00	0.00E+00	8.06E+00	8.06E+00	0.00E+00	3.55E-02	8.10E+00	4
120	6.033	14.438	10	9.18E+00	0.00E+00	9.18E+00	9.18E+00	0.00E+00	4.04E-02	9.22E+00	4
121	6.032	12.989	10	7.77E+00	0.00E+00	7.77E+00	7.77E+00	0.00E+00	3.42E-02	7.80E+00	4
122	5.929	12.964	10	1.12E+01	0.00E+00	1.12E+01	1.12E+01	0.00E+00	4.93E-02	1.12E+01	4
123	6.033	12.883	10	7.52E+00	0.00E+00	7.52E+00	7.52E+00	0.00E+00	3.31E-02	7.55E+00	4
124	5.934	12.874	10	1.07E+01	0.00E+00	1.07E+01	1.07E+01	0.00E+00	4.71E-02	1.07E+01	4
125	5.888	13.090	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
126	5.793	13.170	10	1.55E+01	0.00E+00	1.55E+01	1.55E+01	0.00E+00	6.82E-02	1.56E+01	5
127	5.789	13.080	10	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
128	5.929	13.162	10	1.18E+01	0.00E+00	1.18E+01	1.18E+01	0.00E+00	5.19E-02	1.19E+01	4
129	6.018	13.474	10	9.04E+00	0.00E+00	9.04E+00	9.04E+00	0.00E+00	3.98E-02	9.08E+00	4
130	6.010	13.396	10	9.29E+00	0.00E+00	9.29E+00	9.29E+00	0.00E+00	4.09E-02	9.33E+00	4
131	6.016	13.310	10	8.87E+00	0.00E+00	8.87E+00	8.87E+00	0.00E+00	3.90E-02	8.91E+00	4
132	6.074	13.908	10	6.84E+00	0.00E+00	6.84E+00	6.84E+00	0.00E+00	3.01E-02	6.87E+00	4
133	6.062	13.731	10	7.22E+00	0.00E+00	7.22E+00	7.22E+00	0.00E+00	3.18E-02	7.25E+00	4
134	6.072	13.821	10	6.86E+00	0.00E+00	6.86E+00	6.86E+00	0.00E+00	3.02E-02	6.89E+00	4
189	5.211	12.855	7	7.09E+00	0.00E+00	7.09E+00	7.09E+00	0.00E+00	3.12E-02	7.12E+00	4
190	5.817	12.688	7	1.29E+01	0.00E+00	1.29E+01	1.29E+01	0.00E+00	5.68E-02	1.30E+01	4
191	5.850	12.720	7	1.25E+01	0.00E+00	1.25E+01	1.25E+01	0.00E+00	5.50E-02	1.26E+01	4
192	5.199	13.137	7	7.37E+00	0.00E+00	7.37E+00	7.37E+00	0.00E+00	3.24E-02	7.40E+00	4
193	5.224	13.195	7	8.13E+00	0.00E+00	8.13E+00	8.13E+00	0.00E+00	3.58E-02	8.17E+00	4
194	5.504	12.164	7	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
195	5.583	12.163	7	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
196	4.968	13.187	7	3.82E+00	0.00E+00	3.82E+00	3.82E+00	0.00E+00	1.68E-02	3.84E+00	3
197	5.033	13.123	7	4.39E+00	0.00E+00	4.39E+00	4.39E+00	0.00E+00	1.93E-02	4.41E+00	3
198	5.102	14.383	7	7.60E+00	0.00E+00	7.60E+00	7.60E+00	0.00E+00	3.34E-02	7.63E+00	4
199	5.115	14.389	7	7.92E+00	0.00E+00	7.92E+00	7.92E+00	0.00E+00	3.48E-02	7.95E+00	4
210	5.928	14.339	8	1.60E+01	0.00E+00	1.60E+01	1.60E+01	0.00E+00	7.04E-02	1.61E+01	5
211	5.764	13.557	8	1.81E+01	0.00E+00	1.81E+01	1.81E+01	0.00E+00	7.96E-02	1.82E+01	5
212	5.766	13.622	8	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
213	5.767	13.674	8	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
214	5.958	13.839	8	1.26E+01	0.00E+00	1.26E+01	1.26E+01	0.00E+00	5.54E-02	1.27E+01	4
215	5.913	13.903	8	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
216	5.912	13.851	8	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
231	5.991	14.398	10	1.19E+01	0.00E+00	1.19E+01	1.19E+01	0.00E+00	5.24E-02	1.20E+01	4
232	6.000	14.484	10	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
233	6.059	14.191	10	7.75E+00	0.00E+00	7.75E+00	7.75E+00	0.00E+00	3.41E-02	7.78E+00	4
234	6.048	14.352	10	8.19E+00	0.00E+00	8.19E+00	8.19E+00	0.00E+00	3.60E-02	8.23E+00	4
235	5.928	14.253	10	1.56E+01	0.00E+00	1.56E+01	1.56E+01	0.00E+00	6.86E-02	1.57E+01	5
236	5.995	14.318	10	1.15E+01	0.00E+00	1.15E+01	1.15E+01	0.00E+00	5.06E-02	1.16E+01	4
240	5.917	14.848	10	1.93E+01	0.00E+00	1.93E+01	1.93E+01	0.00E+00	8.49E-02	1.94E+01	5
241	5.911	14.774	10	1.95E+01	0.00E+00	1.95E+01	1.95E+01	0.00E+00	8.58E-02	1.96E+01	5

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

242	5.917	14.700	10	1.85E+01	0.00E+00	1.85E+01	1.85E+01	0.00E+00	8.14E-02	1.86E+01	5
261	6.241	15.673	10	3.35E-02	0.00E+00	3.35E-02	3.35E-02	0.00E+00	1.47E-04	3.36E-02	1
264	6.044	15.980	10	5.73E+00	0.00E+00	5.73E+00	5.73E+00	0.00E+00	2.52E-02	5.76E+00	3
269	5.451	13.254	10	1.53E+01	0.00E+00	1.53E+01	1.53E+01	0.00E+00	6.73E-02	1.54E+01	5
270	5.514	13.209	10	1.65E+01	0.00E+00	1.65E+01	1.65E+01	0.00E+00	7.26E-02	1.66E+01	5
271	5.566	13.193	10	1.72E+01	0.00E+00	1.72E+01	1.72E+01	0.00E+00	7.57E-02	1.73E+01	5
295	5.413	12.882	10	1.30E+01	0.00E+00	1.30E+01	1.30E+01	0.00E+00	5.72E-02	1.31E+01	4
296	5.537	12.816	10	1.51E+01	0.00E+00	1.51E+01	1.51E+01	0.00E+00	6.64E-02	1.52E+01	5
297	5.496	12.799	10	1.43E+01	0.00E+00	1.43E+01	1.43E+01	0.00E+00	6.29E-02	1.44E+01	4
298	5.561	12.909	10	1.58E+01	0.00E+00	1.58E+01	1.58E+01	0.00E+00	6.95E-02	1.59E+01	5
299	5.615	12.839	10	1.57E+01	0.00E+00	1.57E+01	1.57E+01	0.00E+00	6.91E-02	1.58E+01	5
300	5.608	12.984	10	1.64E+01	0.00E+00	1.64E+01	1.64E+01	0.00E+00	7.22E-02	1.65E+01	5
303	6.276	11.651	10	3.14E-01	0.00E+00	3.14E-01	3.14E-01	0.00E+00	1.38E-03	3.15E-01	2
304	5.755	11.682	10	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
305	5.635	11.734	10	1.06E+01	0.00E+00	1.06E+01	1.06E+01	0.00E+00	4.66E-02	1.06E+01	4
306	5.353	11.802	10	8.71E+00	0.00E+00	8.71E+00	8.71E+00	0.00E+00	3.83E-02	8.75E+00	4
307	5.207	11.849	10	5.15E+00	0.00E+00	5.15E+00	5.15E+00	0.00E+00	2.27E-02	5.17E+00	3
308	4.846	12.296	10	2.02E+00	0.00E+00	2.02E+00	2.02E+00	0.00E+00	8.89E-03	2.03E+00	2
309	5.181	11.974	10	4.94E+00	0.00E+00	4.94E+00	4.94E+00	0.00E+00	2.17E-02	4.96E+00	3
310	4.753	12.292	10	1.19E+00	0.00E+00	1.19E+00	1.19E+00	0.00E+00	5.24E-03	1.20E+00	2
311	4.701	12.491	10	6.16E-01	0.00E+00	6.16E-01	6.16E-01	0.00E+00	2.71E-03	6.19E-01	2
316	4.659	13.174	10	1.40E-01	0.00E+00	1.40E-01	1.40E-01	0.00E+00	6.16E-04	1.41E-01	1
317	4.708	14.090	10	9.18E-01	0.00E+00	9.18E-01	9.18E-01	0.00E+00	4.04E-03	9.22E-01	2
319	4.779	14.681	10	1.90E+00	0.00E+00	1.90E+00	1.90E+00	0.00E+00	8.36E-03	1.91E+00	2
320	4.990	15.031	10	7.09E+00	0.00E+00	7.09E+00	7.09E+00	0.00E+00	3.12E-02	7.12E+00	4
321	5.097	15.098	10	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
322	5.324	15.511	10	1.59E+01	0.00E+00	1.59E+01	1.59E+01	0.00E+00	7.00E-02	1.60E+01	5
323	5.639	15.789	10	9.51E+01	0.00E+00	9.51E+01	9.51E+01	0.00E+00	4.18E-01	9.55E+01	8
324	5.484	15.661	10	4.79E+01	0.00E+00	4.79E+01	4.79E+01	0.00E+00	2.11E-01	4.81E+01	6
325	5.702	14.442	10	2.72E+01	0.00E+00	2.72E+01	2.72E+01	0.00E+00	1.20E-01	2.73E+01	5
326	5.689	14.515	10	2.82E+01	0.00E+00	2.82E+01	2.82E+01	0.00E+00	1.24E-01	2.83E+01	5
327	5.512	14.539	10	2.48E+01	0.00E+00	2.48E+01	2.48E+01	0.00E+00	1.09E-01	2.49E+01	5
328	5.636	14.371	10	2.69E+01	0.00E+00	2.69E+01	2.69E+01	0.00E+00	1.18E-01	2.70E+01	5
329	5.419	13.723	10	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.13E-02	1.63E+01	5
330	5.408	13.795	10	1.62E+01	0.00E+00	1.62E+01	1.62E+01	0.00E+00	7.13E-02	1.63E+01	5
331	5.493	13.630	10	1.83E+01	0.00E+00	1.83E+01	1.83E+01	0.00E+00	8.05E-02	1.84E+01	5
332	5.361	13.699	10	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
333	5.363	13.843	10	1.46E+01	0.00E+00	1.46E+01	1.46E+01	0.00E+00	6.42E-02	1.47E+01	4
334	5.691	13.943	10	2.21E+01	0.00E+00	2.21E+01	2.21E+01	0.00E+00	9.72E-02	2.22E+01	5
335	5.690	14.073	10	2.33E+01	0.00E+00	2.33E+01	2.33E+01	0.00E+00	1.03E-01	2.34E+01	5
336	5.654	14.156	10	2.47E+01	0.00E+00	2.47E+01	2.47E+01	0.00E+00	1.09E-01	2.48E+01	5
337	5.627	13.811	10	2.15E+01	0.00E+00	2.15E+01	2.15E+01	0.00E+00	9.46E-02	2.16E+01	5
338	5.888	12.262	10	1.02E+01	0.00E+00	1.02E+01	1.02E+01	0.00E+00	4.49E-02	1.02E+01	4
339	5.993	12.248	10	7.50E+00	0.00E+00	7.50E+00	7.50E+00	0.00E+00	3.30E-02	7.53E+00	4
340	5.752	12.293	10	1.24E+01	0.00E+00	1.24E+01	1.24E+01	0.00E+00	5.46E-02	1.25E+01	4
341	5.706	12.340	10	1.27E+01	0.00E+00	1.27E+01	1.27E+01	0.00E+00	5.59E-02	1.28E+01	4
348	6.048	14.515	10	8.21E+00	0.00E+00	8.21E+00	8.21E+00	0.00E+00	3.61E-02	8.25E+00	4
349	6.052	12.911	10	6.92E+00	0.00E+00	6.92E+00	6.92E+00	0.00E+00	3.04E-02	6.95E+00	4
350	6.039	13.007	10	7.57E+00	0.00E+00	7.57E+00	7.57E+00	0.00E+00	3.33E-02	7.60E+00	4
351	5.955	12.889	10	1.01E+01	0.00E+00	1.01E+01	1.01E+01	0.00E+00	4.44E-02	1.01E+01	4
352	5.960	12.980	10	1.03E+01	0.00E+00	1.03E+01	1.03E+01	0.00E+00	4.53E-02	1.03E+01	4
353	5.884	13.058	10	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
354	5.911	13.172	10	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
355	5.823	13.093	10	1.45E+01	0.00E+00	1.45E+01	1.45E+01	0.00E+00	6.38E-02	1.46E+01	4
356	5.820	13.172	10	1.49E+01	0.00E+00	1.49E+01	1.49E+01	0.00E+00	6.56E-02	1.50E+01	4
357	6.039	13.482	10	8.12E+00	0.00E+00	8.12E+00	8.12E+00	0.00E+00	3.57E-02	8.16E+00	4
358	6.038	13.406	10	8.13E+00	0.00E+00	8.13E+00	8.13E+00	0.00E+00	3.58E-02	8.17E+00	4
359	6.041	13.323	10	7.88E+00	0.00E+00	7.88E+00	7.88E+00	0.00E+00	3.47E-02	7.91E+00	4
360	6.145	13.753	10	4.06E+00	0.00E+00	4.06E+00	4.06E+00	0.00E+00	1.79E-02	4.08E+00	3
361	6.165	13.823	10	3.50E+00	0.00E+00	3.50E+00	3.50E+00	0.00E+00	1.54E-02	3.52E+00	3
362	6.119	13.900	10	5.04E+00	0.00E+00	5.04E+00	5.04E+00	0.00E+00	2.22E-02	5.06E+00	3
405	6.245	15.441	7	6.10E-02	0.00E+00	6.10E-02	6.10E-02	0.00E+00	2.68E-04	6.13E-02	1
416	5.798	12.686	7	1.33E+01	0.00E+00	1.33E+01	1.33E+01	0.00E+00	5.85E-02	1.34E+01	4
417	5.881	12.714	7	1.17E+01	0.00E+00	1.17E+01	1.17E+01	0.00E+00	5.15E-02	1.18E+01	4
418	5.228	13.115	7	8.08E+00	0.00E+00	8.08E+00	8.08E+00	0.00E+00	3.56E-02	8.12E+00	4
419	5.264	13.099	7	9.13E+00	0.00E+00	9.13E+00	9.13E+00	0.00E+00	4.02E-02	9.17E+00	4
420	5.601	12.207	7	1.28E+01	0.00E+00	1.28E+01	1.28E+01	0.00E+00	5.63E-02	1.29E+01	4
421	5.517	12.227	7	1.23E+01	0.00E+00	1.23E+01	1.23E+01	0.00E+00	5.41E-02	1.24E+01	4
422	4.992	13.086	7	3.96E+00	0.00E+00	3.96E+00	3.96E+00	0.00E+00	1.74E-02	3.98E+00	3
423	4.962	13.219	7	3.79E+00	0.00E+00	3.79E+00	3.79E+00	0.00E+00	1.67E-02	3.81E+00	3
424	5.069	14.379	7	7.10E+00	0.00E+00	7.10E+00	7.10E+00	0.00E+00	3.12E-02	7.13E+00	4
425	5.100	14.393	7	7.57E+00	0.00E+00	7.57E+00	7.57E+00	0.00E+00	3.33E-02	7.60E+00	4
439	5.211	12.851	8	7.08E+00	0.00E+00	7.08E+00	7.08E+00	0.00E+00	3.12E-02	7.11E+00	4

Table G3
GB Exposure Estimates
Light Infantry Brigade, Defense

442	5.998	14.225	8	1.13E+01	0.00E+00	1.13E+01	1.13E+01	0.00E+00	4.97E-02	1.13E+01	4
443	5.724	13.641	8	1.92E+01	0.00E+00	1.92E+01	1.92E+01	0.00E+00	8.45E-02	1.93E+01	5
444	5.772	13.525	8	1.77E+01	0.00E+00	1.77E+01	1.77E+01	0.00E+00	7.79E-02	1.78E+01	5
445	5.724	13.585	8	1.88E+01	0.00E+00	1.88E+01	1.88E+01	0.00E+00	8.27E-02	1.89E+01	5
446	5.932	13.871	8	1.40E+01	0.00E+00	1.40E+01	1.40E+01	0.00E+00	6.16E-02	1.41E+01	4
447	5.920	13.941	8	1.48E+01	0.00E+00	1.48E+01	1.48E+01	0.00E+00	6.51E-02	1.49E+01	4
448	5.927	13.817	8	1.41E+01	0.00E+00	1.41E+01	1.41E+01	0.00E+00	6.20E-02	1.42E+01	4
Case 2: Protected 4 rounds at aimpoint (7.60, 13.10)											
37	7.529	13.326	10	1.36E+01	0.00E+00	1.36E+01	1.36E+01	0.00E+00	5.98E-02	1.37E+01	4
38	7.483	13.327	10	2.28E+01	0.00E+00	2.28E+01	2.28E+01	0.00E+00	1.00E-01	2.29E+01	5
39	7.413	13.314	10	1.54E+00	0.00E+00	1.54E+00	1.54E+00	0.00E+00	6.78E-03	1.55E+00	2
47	7.951	12.959	10	2.42E+01	0.00E+00	2.42E+01	4.79E+01	0.00E+00	2.11E-01	2.44E+01	5
49	7.819	12.680	10	3.01E+00	0.00E+00	3.01E+00	2.28E+01	0.00E+00	1.00E-01	3.11E+00	3
52	7.782	12.305	10	0.00E+00	0.00E+00	0.00E+00	9.53E+00	0.00E+00	4.19E-02	4.19E-02	1
53	7.849	12.489	10	0.00E+00	0.00E+00	0.00E+00	6.42E+02	0.00E+00	2.82E+00	2.82E+00	2
54	7.712	12.136	10	0.00E+00	0.00E+00	0.00E+00	9.71E-01	0.00E+00	4.27E-03	4.27E-03	1
55	7.633	11.994	10	0.00E+00	0.00E+00	0.00E+00	1.79E+01	0.00E+00	7.88E-02	7.88E-02	1
56	7.360	11.854	10	0.00E+00	0.00E+00	0.00E+00	2.87E+01	0.00E+00	1.26E-01	1.26E-01	1
59	7.642	12.314	10	0.00E+00	0.00E+00	0.00E+00	7.20E+00	0.00E+00	3.17E-02	3.17E-02	1
178	7.506	12.976	7	0.00E+00	0.00E+00	0.00E+00	7.88E+02	0.00E+00	3.47E+00	3.47E+00	3
185	7.463	12.752	7	0.00E+00	0.00E+00	0.00E+00	4.82E+02	0.00E+00	2.12E+00	2.12E+00	2
186	7.547	12.760	7	0.00E+00	0.00E+00	0.00E+00	9.34E+01	0.00E+00	4.11E-01	4.11E-01	2
267	7.530	13.256	10	9.59E+00	0.00E+00	9.59E+00	7.59E+01	0.00E+00	3.34E-01	9.92E+00	4
268	7.463	13.247	10	7.61E+00	0.00E+00	7.61E+00	1.22E+02	0.00E+00	5.37E-01	8.15E+00	4
276	7.968	12.917	10	1.33E+02	0.00E+00	1.33E+02	9.85E+02	0.00E+00	4.33E+00	1.37E+02	8
277	7.863	12.777	10	1.83E+00	0.00E+00	1.83E+00	2.02E+00	0.00E+00	8.89E-03	1.84E+00	2
278	7.878	12.691	10	5.20E+00	0.00E+00	5.20E+00	2.39E+01	0.00E+00	1.05E-01	5.31E+00	3
280	7.857	12.530	10	5.63E-04	0.00E+00	5.63E-04	5.00E+02	0.00E+00	2.20E+00	2.20E+00	2
281	7.824	12.394	10	0.00E+00	0.00E+00	0.00E+00	4.05E+02	0.00E+00	1.78E+00	1.78E+00	2
282	7.724	12.188	10	0.00E+00	0.00E+00	0.00E+00	4.55E-01	0.00E+00	2.00E-03	2.00E-03	1
283	7.648	12.035	10	0.00E+00	0.00E+00	0.00E+00	1.01E+01	0.00E+00	4.44E-02	4.44E-02	1
284	7.275	11.825	10	0.00E+00	0.00E+00	0.00E+00	4.63E+00	0.00E+00	2.04E-02	2.04E-02	1
286	7.480	11.946	10	0.00E+00	0.00E+00	0.00E+00	8.45E+01	0.00E+00	3.72E-01	3.72E-01	2
412	7.534	12.774	7	0.00E+00	0.00E+00	0.00E+00	2.15E+02	0.00E+00	9.46E-01	9.46E-01	2
413	7.448	12.779	7	0.00E+00	0.00E+00	0.00E+00	4.87E+02	0.00E+00	2.14E+00	2.14E+00	2
438	7.510	12.983	8	0.00E+00	0.00E+00	0.00E+00	7.25E+02	0.00E+00	3.19E+00	3.19E+00	3

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

VX 152mm Artillery
 Light Attack
 Height of Release: 15m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected Troops				18 rounds at aimpoint (5.60, 14.20)							
40	5.550	13.245	10	5.57E-01	6.16E+00	7.80E-01	5.57E-01	6.16E+00	4.39E+01	4.47E+01	6
41	5.474	13.201	10	9.64E-02	1.07E+00	1.35E-01	9.64E-02	1.07E+00	7.62E+00	7.76E+00	4
42	5.507	13.288	10	3.06E-01	3.48E+00	4.28E-01	3.06E-01	3.48E+00	2.48E+01	2.52E+01	5
67	5.560	12.798	10	1.42E-01	7.15E-01	1.99E-01	1.42E-01	7.15E-01	5.20E+00	5.40E+00	3
68	5.483	12.959	10	6.19E-02	6.19E-01	8.67E-02	6.19E-02	6.19E-01	4.42E+00	4.51E+00	3
69	5.563	12.908	10	2.43E-01	1.95E+00	3.40E-01	2.43E-01	1.95E+00	1.40E+01	1.43E+01	4
70	5.463	12.826	10	6.38E-03	8.12E-02	8.93E-03	6.38E-03	8.12E-02	5.77E-01	5.86E-01	2
71	5.648	12.900	10	3.04E-01	2.41E+00	4.26E-01	3.04E-01	2.41E+00	1.73E+01	1.77E+01	5
72	5.451	12.890	10	5.11E-03	1.14E-01	7.15E-03	5.11E-03	1.14E-01	8.05E-01	8.12E-01	2
102	5.474	13.777	10	3.33E-02	6.22E-01	4.66E-02	3.33E-02	6.22E-01	4.40E+00	4.45E+00	3
103	5.406	13.666	10	2.62E-05	0.00E+00	3.67E-05	2.62E-05	0.00E+00	3.67E-05	7.34E-05	1
104	5.461	13.842	10	3.49E-04	2.52E-02	4.89E-04	3.49E-04	2.52E-02	1.77E-01	1.77E-01	1
105	5.476	13.706	10	7.28E-02	1.18E+00	1.02E-01	7.28E-02	1.18E+00	8.36E+00	8.46E+00	4
106	5.642	13.947	10	2.96E+01	6.68E+02	4.14E+01	2.96E+01	6.68E+02	4.72E+03	4.76E+03	8
107	5.653	13.814	10	1.30E+01	2.07E+02	1.82E+01	1.30E+01	2.07E+02	1.47E+03	1.49E+03	8
108	5.627	14.130	10	2.89E+00	1.56E+02	4.05E+00	2.89E+00	1.56E+02	1.10E+03	1.10E+03	8
109	5.702	14.036	10	1.63E+00	4.72E+01	2.28E+00	1.63E+00	4.72E+01	3.33E+02	3.35E+02	8
110	5.702	12.379	10	8.83E-03	0.00E+00	1.24E-02	8.83E-03	0.00E+00	1.24E-02	2.47E-02	1
126	5.793	13.170	10	4.45E-02	5.58E-01	6.23E-02	4.45E-02	5.58E-01	3.97E+00	4.03E+00	3
127	5.789	13.080	10	3.61E-02	4.80E-01	5.05E-02	3.61E-02	4.80E-01	3.41E+00	3.46E+00	3
190	5.817	12.688	7	1.30E-08	0.00E+00	1.82E-08	1.30E-08	0.00E+00	1.82E-08	3.64E-08	1
195	5.583	12.163	7	4.39E-03	0.00E+00	6.15E-03	4.39E-03	0.00E+00	6.15E-03	1.23E-02	1
211	5.764	13.557	8	2.18E-01	3.06E+00	3.05E-01	2.18E-01	3.06E+00	2.17E+01	2.20E+01	5
212	5.766	13.622	8	1.51E-01	2.26E+00	2.11E-01	1.51E-01	2.26E+00	1.60E+01	1.62E+01	5
213	5.767	13.674	8	9.57E-02	1.51E+00	1.34E-01	9.57E-02	1.51E+00	1.07E+01	1.08E+01	4
269	5.451	13.254	10	4.23E-02	6.09E-01	5.92E-02	4.23E-02	6.09E-01	4.32E+00	4.38E+00	3
270	5.514	13.209	10	2.64E-01	2.90E+00	3.70E-01	2.64E-01	2.90E+00	2.07E+01	2.10E+01	5
271	5.566	13.193	10	5.54E-01	5.88E+00	7.76E-01	5.54E-01	5.88E+00	4.19E+01	4.27E+01	6
295	5.413	12.882	10	2.08E-06	0.00E+00	2.91E-06	2.08E-06	0.00E+00	2.91E-06	5.82E-06	1
296	5.537	12.816	10	1.13E-01	6.61E-01	1.58E-01	1.13E-01	6.61E-01	4.79E+00	4.94E+00	3
297	5.496	12.799	10	3.98E-02	2.12E-01	5.57E-02	3.98E-02	2.12E-01	1.54E+00	1.60E+00	2
298	5.561	12.909	10	2.39E-01	1.92E+00	3.35E-01	2.39E-01	1.92E+00	1.38E+01	1.41E+01	4
299	5.615	12.839	10	2.42E-01	1.59E+00	3.39E-01	2.42E-01	1.59E+00	1.15E+01	1.18E+01	4
300	5.608	12.984	10	3.85E-01	3.59E+00	5.39E-01	3.85E-01	3.59E+00	2.57E+01	2.62E+01	5
329	5.419	13.723	10	2.25E-05	0.00E+00	3.15E-05	2.25E-05	0.00E+00	3.15E-05	6.30E-05	1
331	5.493	13.630	10	2.49E-01	3.58E+00	3.49E-01	2.49E-01	3.58E+00	2.54E+01	2.58E+01	5
334	5.691	13.943	10	1.36E+01	2.90E+02	1.90E+01	1.36E+01	2.90E+02	2.05E+03	2.07E+03	8
335	5.690	14.073	10	3.14E+01	1.52E+03	4.40E+01	3.14E+01	1.52E+03	1.07E+04	1.07E+04	8
336	5.654	14.156	10	1.68E+01	8.31E+02	2.35E+01	1.68E+01	8.31E+02	5.84E+03	5.86E+03	8
337	5.627	13.811	10	1.32E+01	2.17E+02	1.85E+01	1.32E+01	2.17E+02	1.54E+03	1.56E+03	8
340	5.752	12.293	10	2.55E-08	0.00E+00	3.57E-08	2.55E-08	0.00E+00	3.57E-08	7.14E-08	1
341	5.706	12.340	10	5.23E-03	0.00E+00	7.32E-03	5.23E-03	0.00E+00	7.32E-03	1.46E-02	1
355	5.823	13.093	10	2.41E-03	1.30E-01	3.37E-03	2.41E-03	1.30E-01	9.13E-01	9.17E-01	2
356	5.820	13.172	10	4.71E-03	1.88E-01	6.59E-03	4.71E-03	1.88E-01	1.32E+00	1.33E+00	2
416	5.798	12.686	7	2.66E-04	0.00E+00	3.72E-04	2.66E-04	0.00E+00	3.72E-04	7.45E-04	1
420	5.601	12.207	7	7.06E-03	0.00E+00	9.88E-03	7.06E-03	0.00E+00	9.88E-03	1.98E-02	1
421	5.517	12.227	7	1.57E-05	0.00E+00	2.20E-05	1.57E-05	0.00E+00	2.20E-05	4.40E-05	1
443	5.724	13.641	8	1.01E+00	1.50E+01	1.41E+00	1.01E+00	1.50E+01	1.06E+02	1.08E+02	8
444	5.772	13.525	8	1.72E-01	2.34E+00	2.41E-01	1.72E-01	2.34E+00	1.66E+01	1.69E+01	5
445	5.724	13.585	8	9.44E-01	1.32E+01	1.32E+00	9.44E-01	1.32E+01	9.37E+01	9.50E+01	8
Case 2: Protected				18 rounds at aimpoint (5.60, 14.20)							
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	1.06E-03	5.73E+00	4.01E+01	4.01E+01	6
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-01	6.94E+00	6.94E+00	4
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	3.90E-04	3.24E+00	2.27E+01	2.27E+01	5
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-01	4.66E+00	4.66E+00	3
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-01	4.03E+00	4.03E+00	3
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	3.36E-04	1.81E+00	1.27E+01	1.27E+01	4
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.55E-02	5.29E-01	5.29E-01	2
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	3.75E-04	2.24E+00	1.57E+01	1.57E+01	5
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-01	7.42E-01	7.42E-01	2
102	5.474	13.777	10	0.00E+00	2.07E-01	0.00E+00	0.00E+00	5.93E-01	4.15E+00	4.15E+00	3
104	5.461	13.842	10	0.00E+00	8.40E-03	0.00E+00	0.00E+00	2.40E-02	1.68E-01	1.68E-01	1
105	5.476	13.706	10	0.00E+00	3.77E-01	0.00E+00	2.43E-05	1.13E+00	7.91E+00	7.91E+00	4
106	5.642	13.947	10	2.21E-01	2.23E+02	3.09E-01	8.33E-01	6.36E+02	4.45E+03	4.45E+03	8
107	5.653	13.814	10	2.40E-01	6.91E+01	3.36E-01	7.36E-01	1.97E+02	1.38E+03	1.38E+03	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

108	5.627	14.130	10	2.60E-03	5.20E+01	3.64E-03	1.45E-02	1.49E+02	1.04E+03	1.04E+03	8
109	5.702	14.036	10	1.36E-03	1.57E+01	1.90E-03	8.16E-03	4.50E+01	3.15E+02	3.15E+02	8
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-01	3.63E+00	3.63E+00	3
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-01	3.12E+00	3.12E+00	3
211	5.764	13.557	8	0.00E+00	7.27E-01	0.00E+00	5.64E-04	2.89E+00	2.02E+01	2.02E+01	5
212	5.766	13.622	8	0.00E+00	6.90E-01	0.00E+00	2.50E-04	2.15E+00	1.51E+01	1.51E+01	5
213	5.767	13.674	8	0.00E+00	4.93E-01	0.00E+00	1.12E-04	1.44E+00	1.01E+01	1.01E+01	4
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-01	3.96E+00	3.96E+00	3
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	3.99E-04	2.70E+00	1.89E+01	1.89E+01	5
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	9.21E-04	5.47E+00	3.83E+01	3.83E+01	6
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-01	4.31E+00	4.31E+00	3
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-01	1.38E+00	1.38E+00	2
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	3.02E-04	1.79E+00	1.25E+01	1.25E+01	4
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	2.75E-04	1.47E+00	1.03E+01	1.03E+01	4
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	5.01E-04	3.33E+00	2.33E+01	2.33E+01	5
331	5.493	13.630	10	0.00E+00	8.98E-01	0.00E+00	4.68E-04	3.39E+00	2.37E+01	2.37E+01	5
334	5.691	13.943	10	7.83E-02	9.66E+01	1.10E-01	3.05E-01	2.76E+02	1.93E+03	1.93E+03	8
335	5.690	14.073	10	6.11E-02	5.06E+02	8.55E-02	2.89E-01	1.45E+03	1.02E+04	1.02E+04	8
336	5.654	14.156	10	2.66E-02	2.77E+02	3.72E-02	1.32E-01	7.92E+02	5.54E+03	5.54E+03	8
337	5.627	13.811	10	2.19E-01	7.25E+01	3.07E-01	6.73E-01	2.07E+02	1.45E+03	1.45E+03	8
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-01	8.47E-01	8.47E-01	2
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-01	1.23E+00	1.23E+00	2
443	5.724	13.641	8	0.00E+00	4.84E+00	0.00E+00	3.11E-03	1.43E+01	1.00E+02	1.00E+02	8
444	5.772	13.525	8	0.00E+00	3.87E-01	0.00E+00	1.23E-04	2.20E+00	1.54E+01	1.54E+01	5
445	5.724	13.585	8	0.00E+00	3.84E+00	0.00E+00	2.54E-03	1.25E+01	8.75E+01	8.75E+01	8

VX MRLS
Moderate Attack
Height of Release: 15m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected 240 rounds at aimpoint (5.70, 14.65)											
1	6.093	14.476	10	2.15E-06	0.00E+00	3.01E-06	2.15E-06	0.00E+00	3.01E-06	6.02E-06	1
2	6.092	14.323	10	1.71E-02	0.00E+00	2.39E-02	1.71E-02	0.00E+00	2.39E-02	4.79E-02	1
3	6.056	14.272	10	2.60E-01	8.21E-02	3.64E-01	2.60E-01	8.21E-02	9.39E-01	1.30E+00	2
4	5.928	14.340	10	3.94E+01	8.98E+02	5.52E+01	3.94E+01	8.98E+02	6.34E+03	6.40E+03	8
5	5.996	14.233	10	3.73E+01	1.18E+03	5.22E+01	3.73E+01	1.18E+03	8.31E+03	8.36E+03	8
6	5.940	14.453	10	1.55E+01	1.29E+03	2.17E+01	1.55E+01	1.29E+03	9.05E+03	9.07E+03	8
40	5.550	13.245	10	1.86E+00	2.90E+00	2.60E+00	1.86E+00	2.90E+00	2.29E+01	2.55E+01	5
41	5.474	13.201	10	1.24E+00	1.69E+00	1.74E+00	1.24E+00	1.69E+00	1.36E+01	1.53E+01	5
42	5.507	13.288	10	1.70E+00	2.92E+00	2.38E+00	1.70E+00	2.92E+00	2.28E+01	2.52E+01	5
67	5.560	12.798	10	1.10E+00	1.41E-01	1.54E+00	1.10E+00	1.41E-01	2.53E+00	4.07E+00	3
68	5.483	12.959	10	9.25E-01	3.95E-01	1.30E+00	9.25E-01	3.95E-01	4.06E+00	5.36E+00	3
69	5.563	12.908	10	1.24E+00	3.99E-01	1.74E+00	1.24E+00	3.99E-01	4.53E+00	6.27E+00	4
70	5.463	12.826	10	7.22E-01	8.06E-02	1.01E+00	7.22E-01	8.06E-02	1.58E+00	2.59E+00	2
71	5.648	12.900	10	1.49E+00	5.92E-01	2.09E+00	1.49E+00	5.92E-01	6.23E+00	8.32E+00	4
72	5.451	12.890	10	7.09E-01	1.86E-01	9.93E-01	7.09E-01	1.86E-01	2.29E+00	3.29E+00	3
76	5.720	11.676	10	2.92E-01	0.00E+00	4.09E-01	2.92E-01	0.00E+00	4.09E-01	8.18E-01	2
77	5.601	11.699	10	2.99E-01	0.00E+00	4.19E-01	2.99E-01	0.00E+00	4.19E-01	8.37E-01	2
78	5.331	11.805	10	3.68E-02	0.00E+00	5.15E-02	3.68E-02	0.00E+00	5.15E-02	1.03E-01	1
97	5.610	14.388	10	4.66E+01	7.26E+02	6.52E+01	4.66E+01	7.26E+02	5.15E+03	5.21E+03	8
98	5.554	14.447	10	7.39E+01	1.18E+03	1.03E+02	7.39E+01	1.18E+03	8.36E+03	8.47E+03	8
99	5.616	14.500	10	3.44E+01	6.90E+02	4.82E+01	3.44E+01	6.90E+02	4.88E+03	4.93E+03	8
100	5.667	14.564	10	2.90E+01	1.38E+03	4.06E+01	2.90E+01	1.38E+03	9.70E+03	9.74E+03	8
101	5.392	13.905	10	3.82E+00	2.45E+01	5.35E+00	3.82E+00	2.45E+01	1.77E+02	1.82E+02	8
102	5.474	13.777	10	7.37E+00	5.37E+01	1.03E+01	7.37E+00	5.37E+01	3.86E+02	3.97E+02	8
103	5.406	13.666	10	1.81E+00	9.49E+00	2.53E+00	1.81E+00	9.49E+00	6.90E+01	7.15E+01	7
104	5.461	13.842	10	9.83E+00	8.30E+01	1.38E+01	9.83E+00	8.30E+01	5.95E+02	6.09E+02	8
105	5.476	13.706	10	5.01E+00	3.01E+01	7.01E+00	5.01E+00	3.01E+01	2.18E+02	2.25E+02	8
106	5.642	13.947	10	3.34E+01	3.20E+02	4.68E+01	3.34E+01	3.20E+02	2.29E+03	2.33E+03	8
107	5.653	13.814	10	2.29E+01	1.48E+02	3.21E+01	2.29E+01	1.48E+02	1.07E+03	1.10E+03	8
108	5.627	14.130	10	5.75E+01	5.89E+02	8.05E+01	5.75E+01	5.89E+02	4.20E+03	4.28E+03	8
109	5.702	14.036	10	3.46E+01	3.29E+02	4.84E+01	3.46E+01	3.29E+02	2.35E+03	2.40E+03	8
110	5.702	12.379	10	9.09E-01	0.00E+00	1.27E+00	9.09E-01	0.00E+00	1.27E+00	2.55E+00	2
111	5.784	12.296	10	7.71E-01	0.00E+00	1.08E+00	7.71E-01	0.00E+00	1.08E+00	2.16E+00	2
112	5.875	12.255	10	6.93E-01	0.00E+00	9.70E-01	6.93E-01	0.00E+00	9.70E-01	1.94E+00	2
113	5.966	12.148	10	4.39E-01	0.00E+00	6.15E-01	4.39E-01	0.00E+00	6.15E-01	1.23E+00	2
120	6.033	14.438	10	8.45E-01	0.00E+00	1.18E+00	8.45E-01	0.00E+00	1.18E+00	2.37E+00	2
121	6.032	12.989	10	4.46E-01	1.23E-01	6.24E-01	4.46E-01	1.23E-01	1.49E+00	2.11E+00	2
122	5.929	12.964	10	1.21E+00	5.61E-01	1.69E+00	1.21E+00	5.61E-01	5.62E+00	7.32E+00	4

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

123	6.033	12.883	10	4.00E-01	0.00E+00	5.60E-01	4.00E-01	0.00E+00	5.60E-01	1.12E+00	2
124	5.934	12.874	10	1.07E+00	2.34E-01	1.50E+00	1.07E+00	2.34E-01	3.14E+00	4.63E+00	3
125	5.888	13.090	10	1.63E+00	1.53E+00	2.28E+00	1.63E+00	1.53E+00	1.30E+01	1.53E+01	5
126	5.793	13.170	10	1.74E+00	1.99E+00	2.44E+00	1.74E+00	1.99E+00	1.64E+01	1.88E+01	5
127	5.789	13.080	10	1.55E+00	1.19E+00	2.17E+00	1.55E+00	1.19E+00	1.05E+01	1.27E+01	4
128	5.929	13.162	10	1.62E+00	1.98E+00	2.27E+00	1.62E+00	1.98E+00	1.61E+01	1.84E+01	5
129	6.018	13.474	10	1.19E+00	3.39E+00	1.67E+00	1.19E+00	3.39E+00	2.54E+01	2.71E+01	5
130	6.010	13.396	10	1.16E+00	2.56E+00	1.62E+00	1.16E+00	2.56E+00	1.95E+01	2.12E+01	5
131	6.016	13.310	10	8.95E-01	1.45E+00	1.25E+00	8.95E-01	1.45E+00	1.14E+01	1.27E+01	4
132	6.074	13.908	10	8.98E-01	3.21E+00	1.26E+00	8.98E-01	3.21E+00	2.37E+01	2.50E+01	5
133	6.062	13.731	10	6.39E-01	3.20E+00	8.95E-01	6.39E-01	3.20E+00	2.33E+01	2.42E+01	5
134	6.072	13.821	10	6.37E-01	2.73E+00	8.92E-01	6.37E-01	2.73E+00	2.00E+01	2.09E+01	5
189	5.211	12.855	7	1.10E-03	0.00E+00	1.54E-03	1.10E-03	0.00E+00	1.54E-03	3.08E-03	1
190	5.817	12.688	7	1.07E+00	0.00E+00	1.50E+00	1.07E+00	0.00E+00	1.50E+00	3.00E+00	2
191	5.850	12.720	7	1.10E+00	5.44E-02	1.54E+00	1.10E+00	5.44E-02	1.92E+00	3.46E+00	3
193	5.224	13.195	7	3.53E-04	0.00E+00	4.94E-04	3.53E-04	0.00E+00	4.94E-04	9.88E-04	1
194	5.504	12.164	7	4.81E-01	0.00E+00	6.73E-01	4.81E-01	0.00E+00	6.73E-01	1.35E+00	2
195	5.583	12.163	7	6.39E-01	0.00E+00	8.95E-01	6.39E-01	0.00E+00	8.95E-01	1.79E+00	2
210	5.928	14.339	8	3.98E+01	8.99E+02	5.57E+01	3.98E+01	8.99E+02	6.35E+03	6.40E+03	8
211	5.764	13.557	8	4.00E+00	1.75E+01	5.60E+00	4.00E+00	1.75E+01	1.28E+02	1.34E+02	8
212	5.766	13.622	8	5.20E+00	2.51E+01	7.28E+00	5.20E+00	2.51E+01	1.83E+02	1.90E+02	8
213	5.767	13.674	8	6.49E+00	3.34E+01	9.09E+00	6.49E+00	3.34E+01	2.43E+02	2.52E+02	8
214	5.958	13.839	8	1.18E+01	7.67E+01	1.65E+01	1.18E+01	7.67E+01	5.53E+02	5.70E+02	8
215	5.913	13.903	8	4.72E+01	2.11E+02	6.61E+01	4.72E+01	2.11E+02	1.54E+03	1.61E+03	8
216	5.912	13.851	8	2.91E+01	1.31E+02	4.07E+01	2.91E+01	1.31E+02	9.58E+02	9.98E+02	8
231	5.991	14.398	10	1.23E+01	6.30E+02	1.72E+01	1.23E+01	6.30E+02	4.43E+03	4.44E+03	8
232	6.000	14.484	10	7.19E-02	3.46E+00	1.01E-01	7.19E-02	3.46E+00	2.43E+01	2.44E+01	5
233	6.059	14.191	10	7.70E-01	3.48E+00	1.08E+00	7.70E-01	3.48E+00	2.54E+01	2.65E+01	5
234	6.048	14.352	10	7.87E-01	7.13E+01	1.10E+00	7.87E-01	7.13E+01	5.00E+02	5.01E+02	8
235	5.928	14.253	10	7.29E+01	2.54E+03	1.02E+02	7.29E+01	2.54E+03	1.79E+04	1.80E+04	8
236	5.995	14.318	10	2.49E+01	5.78E+02	3.49E+01	2.49E+01	5.78E+02	4.08E+03	4.12E+03	8
242	5.917	14.700	10	4.49E-06	0.00E+00	6.29E-06	4.49E-06	0.00E+00	6.29E-06	1.26E-05	1
269	5.451	13.254	10	1.18E+00	1.90E+00	1.65E+00	1.18E+00	1.90E+00	1.50E+01	1.66E+01	5
270	5.514	13.209	10	1.53E+00	2.03E+00	2.14E+00	1.53E+00	2.03E+00	1.64E+01	1.85E+01	5
271	5.566	13.193	10	1.82E+00	2.40E+00	2.55E+00	1.82E+00	2.40E+00	1.93E+01	2.19E+01	5
295	5.413	12.882	10	4.78E-01	4.13E-02	6.69E-01	4.78E-01	4.13E-02	9.58E-01	1.63E+00	2
296	5.537	12.816	10	1.03E+00	8.85E-02	1.44E+00	1.03E+00	8.85E-02	2.06E+00	3.50E+00	3
297	5.496	12.799	10	8.59E-01	0.00E+00	1.20E+00	8.59E-01	0.00E+00	1.20E+00	2.41E+00	2
298	5.561	12.909	10	1.23E+00	3.97E-01	1.72E+00	1.23E+00	3.97E-01	4.50E+00	6.22E+00	4
299	5.615	12.839	10	1.32E+00	3.00E-01	1.85E+00	1.32E+00	3.00E-01	3.95E+00	5.80E+00	3
300	5.608	12.984	10	1.54E+00	9.12E-01	2.16E+00	1.54E+00	9.12E-01	8.54E+00	1.07E+01	4
304	5.755	11.682	10	2.87E-01	0.00E+00	4.02E-01	2.87E-01	0.00E+00	4.02E-01	8.04E-01	2
305	5.635	11.734	10	3.44E-01	0.00E+00	4.82E-01	3.44E-01	0.00E+00	4.82E-01	9.63E-01	2
306	5.353	11.802	10	5.81E-02	0.00E+00	8.13E-02	5.81E-02	0.00E+00	8.13E-02	1.63E-01	1
325	5.702	14.442	10	4.81E+01	1.30E+03	6.73E+01	4.81E+01	1.30E+03	9.17E+03	9.23E+03	8
326	5.689	14.515	10	2.87E+01	2.06E+03	4.02E+01	2.87E+01	2.06E+03	1.45E+04	1.45E+04	8
327	5.512	14.539	10	1.42E+01	1.29E+01	1.99E+01	1.42E+01	1.29E+01	1.10E+02	1.30E+02	8
328	5.636	14.371	10	3.26E+01	4.73E+02	4.56E+01	3.26E+01	4.73E+02	3.36E+03	3.40E+03	8
329	5.419	13.723	10	3.10E+00	1.73E+01	4.34E+00	3.10E+00	1.73E+01	1.25E+02	1.30E+02	8
330	5.408	13.795	10	3.36E+00	2.04E+01	4.70E+00	3.36E+00	2.04E+01	1.48E+02	1.52E+02	8
331	5.493	13.630	10	3.59E+00	1.86E+01	5.03E+00	3.59E+00	1.86E+01	1.35E+02	1.40E+02	8
332	5.361	13.699	10	7.23E-01	3.28E+00	1.01E+00	7.23E-01	3.28E+00	2.40E+01	2.50E+01	5
333	5.363	13.843	10	1.23E+00	7.14E+00	1.72E+00	1.23E+00	7.14E+00	5.17E+01	5.34E+01	7
334	5.691	13.943	10	2.56E+01	7.80E+02	3.58E+01	2.56E+01	7.80E+02	5.50E+03	5.53E+03	8
335	5.690	14.073	10	4.45E+01	1.14E+03	6.23E+01	4.45E+01	1.14E+03	8.04E+03	8.10E+03	8
336	5.654	14.156	10	6.85E+01	7.49E+02	9.59E+01	6.85E+01	7.49E+02	5.34E+03	5.43E+03	8
337	5.627	13.811	10	2.44E+01	1.40E+02	3.42E+01	2.44E+01	1.40E+02	1.01E+03	1.05E+03	8
338	5.888	12.262	10	6.91E-01	0.00E+00	9.67E-01	6.91E-01	0.00E+00	9.67E-01	1.93E+00	2
339	5.993	12.248	10	3.99E-01	0.00E+00	5.59E-01	3.99E-01	0.00E+00	5.59E-01	1.12E+00	2
340	5.752	12.293	10	7.79E-01	0.00E+00	1.09E+00	7.79E-01	0.00E+00	1.09E+00	2.18E+00	2
341	5.706	12.340	10	8.70E-01	0.00E+00	1.22E+00	8.70E-01	0.00E+00	1.22E+00	2.44E+00	2
348	6.048	14.515	10	1.53E-03	0.00E+00	2.14E-03	1.53E-03	0.00E+00	2.14E-03	4.28E-03	1
349	6.052	12.911	10	2.77E-01	0.00E+00	3.88E-01	2.77E-01	0.00E+00	3.88E-01	7.76E-01	2
350	6.039	13.007	10	3.94E-01	8.67E-02	5.52E-01	3.94E-01	8.67E-02	1.16E+00	1.71E+00	2
351	5.955	12.889	10	9.77E-01	2.47E-01	1.37E+00	9.77E-01	2.47E-01	3.10E+00	4.46E+00	3
352	5.960	12.980	10	1.05E+00	4.93E-01	1.47E+00	1.05E+00	4.93E-01	4.92E+00	6.39E+00	4
353	5.884	13.058	10	1.55E+00	1.30E+00	2.17E+00	1.55E+00	1.30E+00	1.13E+01	1.34E+01	4
354	5.911	13.172	10	1.77E+00	2.25E+00	2.48E+00	1.77E+00	2.25E+00	1.82E+01	2.07E+01	5
355	5.823	13.093	10	1.59E+00	1.34E+00	2.23E+00	1.59E+00	1.34E+00	1.16E+01	1.38E+01	4
356	5.820	13.172	10	1.76E+00	2.08E+00	2.46E+00	1.76E+00	2.08E+00	1.70E+01	1.95E+01	5
357	6.039	13.482	10	7.43E-01	2.03E+00	1.04E+00	7.43E-01	2.03E+00	1.53E+01	1.63E+01	5
358	6.038	13.406	10	6.68E-01	1.40E+00	9.35E-01	6.68E-01	1.40E+00	1.07E+01	1.17E+01	4
359	6.041	13.323	10	5.39E-01	8.15E-01	7.55E-01	5.39E-01	8.15E-01	6.46E+00	7.21E+00	4
360	6.145	13.753	10	4.51E-03	0.00E+00	6.31E-03	4.51E-03	0.00E+00	6.31E-03	1.26E-02	1

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

362	6.119	13.900	10	3.69E-02	1.19E-01	5.17E-02	3.69E-02	1.19E-01	8.85E-01	9.36E-01	2
416	5.798	12.686	7	1.07E+00	0.00E+00	1.50E+00	1.07E+00	0.00E+00	1.50E+00	3.00E+00	2
417	5.881	12.714	7	1.06E+00	3.38E-02	1.48E+00	1.06E+00	3.38E-02	1.72E+00	3.20E+00	3
418	5.228	13.115	7	8.09E-04	0.00E+00	1.13E-03	8.09E-04	0.00E+00	1.13E-03	2.27E-03	1
419	5.264	13.099	7	1.32E-02	0.00E+00	1.85E-02	1.32E-02	0.00E+00	1.85E-02	3.70E-02	1
420	5.601	12.207	7	7.07E-01	0.00E+00	9.90E-01	7.07E-01	0.00E+00	9.90E-01	1.98E+00	2
421	5.517	12.227	7	5.55E-01	0.00E+00	7.77E-01	5.55E-01	0.00E+00	7.77E-01	1.55E+00	2
439	5.211	12.851	8	1.11E-03	0.00E+00	1.55E-03	1.11E-03	0.00E+00	1.55E-03	3.11E-03	1
442	5.998	14.225	8	3.87E+01	1.15E+03	5.42E+01	3.87E+01	1.15E+03	8.10E+03	8.16E+03	8
443	5.724	13.641	8	7.29E+00	4.07E+01	1.02E+01	7.29E+00	4.07E+01	2.95E+02	3.05E+02	8
444	5.772	13.525	8	3.59E+00	1.39E+01	5.03E+00	3.59E+00	1.39E+01	1.02E+02	1.07E+02	8
445	5.724	13.585	8	5.58E+00	2.82E+01	7.81E+00	5.58E+00	2.82E+01	2.05E+02	2.13E+02	8
446	5.932	13.871	8	2.62E+01	1.27E+02	3.67E+01	2.62E+01	1.27E+02	9.26E+02	9.62E+02	8
447	5.920	13.941	8	5.48E+01	2.81E+02	7.67E+01	5.48E+01	2.81E+02	2.04E+03	2.12E+03	8
448	5.927	13.817	8	1.82E+01	8.73E+01	2.55E+01	1.82E+01	8.73E+01	6.37E+02	6.62E+02	8
Case 2: Protected 240 rounds at aimpnt (5.70, 14.65)											
2	6.092	14.323	10	2.54E-06	0.00E+00	3.56E-06	1.63E-05	0.00E+00	2.28E-05	2.64E-05	1
3	6.056	14.272	10	1.08E-05	2.74E-02	1.51E-05	1.22E-04	7.83E-02	5.48E-01	5.48E-01	2
4	5.928	14.340	10	6.55E-01	2.99E+02	9.17E-01	2.05E+00	8.56E+02	5.99E+03	6.00E+03	8
5	5.996	14.233	10	6.78E-01	3.93E+02	9.49E-01	2.13E+00	1.12E+03	7.84E+03	7.84E+03	8
6	5.940	14.453	10	4.10E-02	4.31E+02	5.74E-02	1.45E-01	1.23E+03	8.61E+03	8.61E+03	8
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	1.39E+00	2.58E+00	2.00E+01	2.00E+01	5
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	9.53E-01	1.44E+00	1.14E+01	1.14E+01	4
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	1.23E+00	2.65E+00	2.03E+01	2.03E+01	5
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	6.73E-01	0.00E+00	9.42E-01	9.42E-01	2
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	7.48E-01	2.25E-01	2.62E+00	2.62E+00	2
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	9.08E-01	2.37E-01	2.93E+00	2.93E+00	2
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	4.82E-01	0.00E+00	6.75E-01	6.75E-01	2
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	1.06E+00	3.95E-01	4.25E+00	4.25E+00	3
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	5.32E-01	3.07E-03	7.66E-01	7.66E-01	2
97	5.610	14.388	10	8.45E-01	2.42E+02	1.18E+00	2.63E+00	6.92E+02	4.85E+03	4.85E+03	8
98	5.554	14.447	10	6.13E-01	3.93E+02	8.58E-01	2.19E+00	1.12E+03	7.84E+03	7.84E+03	8
99	5.616	14.500	10	2.98E-01	2.30E+02	4.17E-01	1.01E+00	6.58E+02	4.61E+03	4.61E+03	8
100	5.667	14.564	10	1.64E-01	4.59E+02	2.30E-01	6.43E-01	1.31E+03	9.17E+03	9.17E+03	8
101	5.392	13.905	10	4.34E-01	2.32E+00	6.08E-01	1.63E+00	2.29E+01	1.63E+02	1.63E+02	8
102	5.474	13.777	10	6.89E-01	7.25E+00	9.65E-01	3.17E+00	5.04E+01	3.57E+02	3.58E+02	8
103	5.406	13.666	10	2.92E-02	0.00E+00	4.09E-02	7.91E-01	8.83E+00	6.29E+01	6.30E+01	7
104	5.461	13.842	10	1.07E+00	1.83E+01	1.50E+00	4.05E+00	7.84E+01	5.54E+02	5.56E+02	8
105	5.476	13.706	10	3.07E-01	5.94E-01	4.30E-01	2.20E+00	2.81E+01	2.00E+02	2.00E+02	8
106	5.642	13.947	10	2.00E+00	9.33E+01	2.80E+00	6.98E+00	3.04E+02	2.14E+03	2.14E+03	8
107	5.653	13.814	10	1.72E+00	3.72E+01	2.41E+00	6.59E+00	1.41E+02	9.96E+02	9.99E+02	8
108	5.627	14.130	10	1.84E+00	1.88E+02	2.58E+00	6.07E+00	5.61E+02	3.94E+03	3.94E+03	8
109	5.702	14.036	10	1.77E+00	9.93E+01	2.48E+00	6.26E+00	3.13E+02	2.20E+03	2.20E+03	8
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	5.69E-02	0.00E+00	7.97E-02	7.97E-02	1
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	9.56E-03	0.00E+00	1.34E-02	1.34E-02	1
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	9.29E-04	0.00E+00	1.30E-03	1.30E-03	1
120	6.033	14.438	10	7.39E-03	0.00E+00	1.03E-02	2.47E-02	0.00E+00	3.46E-02	4.49E-02	1
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	3.90E-01	0.00E+00	5.46E-01	5.46E-01	2
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	9.84E-01	3.23E-01	3.64E+00	3.64E+00	3
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	3.19E-01	0.00E+00	4.47E-01	4.47E-01	2
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	7.95E-01	3.14E-02	1.33E+00	1.33E+00	2
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	1.31E+00	1.25E+00	1.06E+01	1.06E+01	4
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.72E+00	1.40E+01	1.40E+01	4
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	1.26E+00	9.34E-01	8.30E+00	8.30E+00	4
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	1.27E+00	1.63E+00	1.32E+01	1.32E+01	4
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	7.23E-01	3.15E+00	2.31E+01	2.31E+01	5
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	7.72E-01	2.38E+00	1.77E+01	1.77E+01	5
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	6.54E-01	1.35E+00	1.04E+01	1.04E+01	4
132	6.074	13.908	10	8.74E-02	3.35E-02	1.22E-01	3.41E-01	2.99E+00	2.14E+01	2.15E+01	5
133	6.062	13.731	10	7.92E-03	0.00E+00	1.11E-02	2.62E-01	2.98E+00	2.12E+01	2.12E+01	5
134	6.072	13.821	10	2.63E-02	1.53E-02	3.68E-02	2.33E-01	2.54E+00	1.81E+01	1.81E+01	5
189	5.211	12.855	7	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	1.43E-03	1.43E-03	1
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	4.79E-01	0.00E+00	6.71E-01	6.71E-01	2
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	5.50E-01	0.00E+00	7.70E-01	7.70E-01	2
193	5.224	13.195	7	0.00E+00	0.00E+00	0.00E+00	3.28E-04	0.00E+00	4.59E-04	4.59E-04	1
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	8.99E-06	0.00E+00	1.26E-05	1.26E-05	1
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	2.28E-04	2.28E-04	1
210	5.928	14.339	8	6.66E-01	3.00E+02	9.32E-01	2.08E+00	8.57E+02	6.00E+03	6.00E+03	8
211	5.764	13.557	8	2.43E-02	0.00E+00	3.40E-02	1.99E+00	1.63E+01	1.17E+02	1.17E+02	8
212	5.766	13.622	8	1.82E-01	1.62E-01	2.55E-01	2.44E+00	2.34E+01	1.67E+02	1.67E+02	8
213	5.767	13.674	8	3.45E-01	1.15E+00	4.83E-01	2.89E+00	3.11E+01	2.22E+02	2.22E+02	8
214	5.958	13.839	8	1.24E+00	1.18E+01	1.74E+00	4.89E+00	7.21E+01	5.12E+02	5.13E+02	8
215	5.913	13.903	8	2.16E+00	5.44E+01	3.02E+00	7.88E+00	2.00E+02	1.41E+03	1.41E+03	8
216	5.912	13.851	8	1.79E+00	2.77E+01	2.51E+00	6.97E+00	1.23E+02	8.71E+02	8.73E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

231	5.991	14.398	10	9.18E-02	2.10E+02	1.29E-01	3.20E-01	6.01E+02	4.21E+03	4.21E+03	8
232	6.000	14.484	10	7.68E-03	1.15E+00	1.08E-02	2.20E-02	3.29E+00	2.31E+01	2.31E+01	5
233	6.059	14.191	10	2.95E-02	1.16E+00	4.13E-02	8.58E-02	3.31E+00	2.33E+01	2.33E+01	5
234	6.048	14.352	10	3.78E-03	2.38E+01	5.29E-03	1.43E-02	6.80E+01	4.76E+02	4.76E+02	8
235	5.928	14.253	10	1.62E+00	8.47E+02	2.27E+00	4.96E+00	2.42E+03	1.69E+04	1.69E+04	8
236	5.995	14.318	10	2.59E-01	1.93E+02	3.63E-01	8.66E-01	5.51E+02	3.86E+03	3.86E+03	8
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	8.66E-01	1.71E+00	1.32E+01	1.32E+01	4
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	1.17E+00	1.78E+00	1.41E+01	1.41E+01	4
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	1.39E+00	2.12E+00	1.68E+01	1.68E+01	5
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	3.65E-01	0.00E+00	5.11E-01	5.11E-01	2
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	6.61E-01	0.00E+00	9.25E-01	9.25E-01	2
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	5.32E-01	0.00E+00	7.45E-01	7.45E-01	2
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	9.05E-01	2.34E-01	2.91E+00	2.91E+00	2
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	8.64E-01	1.26E-01	2.09E+00	2.09E+00	2
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	1.18E+00	6.43E-01	6.15E+00	6.15E+00	4
325	5.702	14.442	10	6.08E-01	4.33E+02	8.51E-01	2.09E+00	1.24E+03	8.68E+03	8.68E+03	8
326	5.689	14.515	10	2.58E-01	6.86E+02	3.61E-01	9.16E-01	1.96E+03	1.37E+04	1.37E+04	8
327	5.512	14.539	10	3.97E-02	4.31E+00	5.56E-02	1.43E-01	1.23E+01	8.63E+01	8.64E+01	8
328	5.636	14.371	10	9.88E-01	1.58E+02	1.38E+00	3.09E+00	4.51E+02	3.16E+03	3.16E+03	8
329	5.419	13.723	10	1.91E-01	2.53E-01	2.67E-01	1.36E+00	1.61E+01	1.15E+02	1.15E+02	8
330	5.408	13.795	10	2.49E-01	1.46E+00	3.49E-01	1.38E+00	1.90E+01	1.35E+02	1.35E+02	8
331	5.493	13.630	10	4.33E-02	0.00E+00	6.06E-02	1.61E+00	1.73E+01	1.23E+02	1.23E+02	8
332	5.361	13.699	10	1.09E-02	0.00E+00	1.53E-02	3.19E-01	3.05E+00	2.18E+01	2.18E+01	5
333	5.363	13.843	10	5.80E-02	1.35E-01	8.12E-02	4.49E-01	6.65E+00	4.72E+01	4.73E+01	6
334	5.691	13.943	10	1.83E+00	2.48E+02	2.56E+00	6.57E+00	7.43E+02	5.21E+03	5.21E+03	8
335	5.690	14.073	10	1.87E+00	3.71E+02	2.62E+00	6.48E+00	1.09E+03	7.64E+03	7.64E+03	8
336	5.654	14.156	10	1.80E+00	2.41E+02	2.52E+00	5.97E+00	7.13E+02	5.00E+03	5.00E+03	8
337	5.627	13.811	10	1.61E+00	3.42E+01	2.25E+00	6.36E+00	1.32E+02	9.33E+02	9.35E+02	8
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	2.49E-03	2.49E-03	1
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	1.10E-02	0.00E+00	1.54E-02	1.54E-02	1
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	2.88E-02	0.00E+00	4.03E-02	4.03E-02	1
348	6.048	14.515	10	1.63E-04	0.00E+00	2.28E-04	4.66E-04	0.00E+00	6.52E-04	8.81E-04	1
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	2.35E-01	0.00E+00	3.29E-01	3.29E-01	2
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	3.49E-01	9.11E-03	5.52E-01	5.52E-01	2
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	7.45E-01	0.00E+00	1.04E+00	1.04E+00	2
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	8.61E-01	2.66E-01	3.07E+00	3.07E+00	3
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	1.26E+00	9.99E-01	8.76E+00	8.76E+00	4
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.37E+00	1.89E+00	1.51E+01	1.51E+01	5
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	1.29E+00	1.09E+00	9.44E+00	9.44E+00	4
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.39E+00	1.81E+00	1.46E+01	1.46E+01	4
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	4.63E-01	1.89E+00	1.39E+01	1.39E+01	4
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	4.56E-01	1.30E+00	9.74E+00	9.74E+00	4
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	4.03E-01	7.58E-01	5.87E+00	5.87E+00	3
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	3.22E-03	3.22E-03	1
362	6.119	13.900	10	1.59E-03	0.00E+00	2.23E-03	1.14E-02	1.11E-01	7.93E-01	7.95E-01	2
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	4.76E-01	0.00E+00	6.66E-01	6.66E-01	2
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	5.24E-01	0.00E+00	7.34E-01	7.34E-01	2
418	5.228	13.115	7	0.00E+00	0.00E+00	0.00E+00	7.52E-04	0.00E+00	1.05E-03	1.05E-03	1
419	5.264	13.099	7	0.00E+00	0.00E+00	0.00E+00	1.23E-02	0.00E+00	1.72E-02	1.72E-02	1
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	8.59E-04	0.00E+00	1.20E-03	1.20E-03	1
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	2.94E-04	2.94E-04	1
439	5.211	12.851	8	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	1.44E-03	1.44E-03	1
442	5.998	14.225	8	7.25E-01	3.85E+02	1.02E+00	2.27E+00	1.10E+03	7.70E+03	7.70E+03	8
443	5.724	13.641	8	4.68E-01	1.23E+00	6.55E-01	3.40E+00	3.80E+01	2.71E+02	2.71E+02	8
444	5.772	13.525	8	4.44E-03	0.00E+00	6.22E-03	1.87E+00	1.29E+01	9.29E+01	9.29E+01	8
445	5.724	13.585	8	1.91E-01	1.08E-03	2.67E-01	2.64E+00	2.62E+01	1.87E+02	1.87E+02	8
446	5.932	13.871	8	1.75E+00	2.70E+01	2.45E+00	6.54E+00	1.20E+02	8.49E+02	8.52E+02	8
447	5.920	13.941	8	2.35E+00	7.90E+01	3.29E+00	8.23E+00	2.67E+02	1.88E+03	1.88E+03	8
448	5.927	13.817	8	1.34E+00	1.34E+01	1.88E+00	5.58E+00	8.22E+01	5.83E+02	5.85E+02	8

VX MRLS
Heavy Attack
Height of Release: 15m

Height of Release: 15m											
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected				720 rounds at aimpoint (5.50, 15.15)							
1	6.093	14.476	10	4.09E+00	9.46E+01	5.73E+00	4.09E+00	9.46E+01	6.68E+02	6.74E+02	8
2	6.092	14.323	10	2.70E+00	2.24E+01	3.78E+00	2.70E+00	2.24E+01	1.61E+02	1.64E+02	8
3	6.056	14.272	10	1.08E+01	7.86E+01	1.51E+01	1.08E+01	7.86E+01	5.65E+02	5.80E+02	8
4	5.928	14.340	10	6.02E+01	1.63E+03	8.43E+01	6.02E+01	1.63E+03	1.15E+04	1.16E+04	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

5	5.996	14.233	10	1.76E+01	2.59E+02	2.46E+01	1.76E+01	2.59E+02	1.84E+03	1.86E+03	8
6	5.940	14.453	10	4.38E+01	1.50E+03	6.13E+01	4.38E+01	1.50E+03	1.06E+04	1.06E+04	8
10	5.849	14.797	10	1.84E+01	8.70E+02	2.58E+01	1.84E+01	8.70E+02	6.12E+03	6.14E+03	8
11	5.840	14.745	10	2.84E+01	9.81E+02	3.98E+01	2.84E+01	9.81E+02	6.91E+03	6.95E+03	8
12	5.853	14.870	10	1.09E+01	7.75E+01	1.53E+01	1.09E+01	7.75E+01	5.58E+02	5.73E+02	8
40	5.550	13.245	10	4.40E+00	6.66E+00	6.16E+00	4.40E+00	6.66E+00	5.28E+01	5.89E+01	7
41	5.474	13.201	10	4.04E+00	5.72E+00	5.66E+00	4.04E+00	5.72E+00	4.57E+01	5.14E+01	7
42	5.507	13.288	10	4.70E+00	8.64E+00	6.58E+00	4.70E+00	8.64E+00	6.71E+01	7.36E+01	7
67	5.560	12.798	10	2.73E+00	6.93E-01	3.82E+00	2.73E+00	6.93E-01	8.67E+00	1.25E+01	4
68	5.483	12.959	10	3.10E+00	1.96E+00	4.34E+00	3.10E+00	1.96E+00	1.81E+01	2.24E+01	5
69	5.563	12.908	10	2.99E+00	1.29E+00	4.19E+00	2.99E+00	1.29E+00	1.32E+01	1.74E+01	5
70	5.463	12.826	10	2.71E+00	9.26E-01	3.79E+00	2.71E+00	9.26E-01	1.03E+01	1.41E+01	4
71	5.648	12.900	10	2.65E+00	1.00E+00	3.71E+00	2.65E+00	1.00E+00	1.07E+01	1.44E+01	4
72	5.451	12.890	10	2.82E+00	1.32E+00	3.95E+00	2.82E+00	1.32E+00	1.32E+01	1.71E+01	5
73	5.605	10.601	10	7.89E-01	0.00E+00	1.10E+00	7.89E-01	0.00E+00	1.10E+00	2.21E+00	2
75	6.278	11.645	10	4.03E-03	0.00E+00	5.64E-03	4.03E-03	0.00E+00	5.64E-03	1.13E-02	1
76	5.720	11.676	10	1.32E+00	0.00E+00	1.85E+00	1.32E+00	0.00E+00	1.85E+00	3.70E+00	3
77	5.601	11.699	10	1.46E+00	0.00E+00	2.04E+00	1.46E+00	0.00E+00	2.04E+00	4.09E+00	3
78	5.331	11.805	10	1.48E+00	0.00E+00	2.07E+00	1.48E+00	0.00E+00	2.07E+00	4.14E+00	3
79	5.184	11.887	10	1.32E+00	0.00E+00	1.85E+00	1.32E+00	0.00E+00	1.85E+00	3.70E+00	3
80	6.177	11.646	10	8.06E-02	0.00E+00	1.13E-01	8.06E-02	0.00E+00	1.13E-01	2.26E-01	1
81	5.121	11.999	10	1.18E+00	0.00E+00	1.65E+00	1.18E+00	0.00E+00	1.65E+00	3.30E+00	3
82	4.782	12.418	10	2.24E-02	0.00E+00	3.14E-02	2.24E-02	0.00E+00	3.14E-02	6.27E-02	1
83	4.701	12.596	10	4.27E-05	0.00E+00	5.98E-05	4.27E-05	0.00E+00	5.98E-05	1.20E-04	1
93	5.004	15.122	10	2.78E-03	0.00E+00	3.89E-03	2.78E-03	0.00E+00	3.89E-03	7.78E-03	1
97	5.610	14.388	10	4.95E+01	8.70E+02	6.93E+01	4.95E+01	8.70E+02	6.16E+03	6.23E+03	8
98	5.554	14.447	10	6.38E+01	9.08E+02	8.93E+01	6.38E+01	9.08E+02	6.45E+03	6.53E+03	8
99	5.616	14.500	10	6.11E+01	1.44E+03	8.55E+01	6.11E+01	1.44E+03	1.02E+04	1.03E+04	8
100	5.667	14.564	10	6.36E+01	1.01E+03	8.90E+01	6.36E+01	1.01E+03	7.16E+03	7.25E+03	8
101	5.392	13.905	10	3.54E+01	3.04E+02	4.96E+01	3.54E+01	3.04E+02	2.18E+03	2.23E+03	8
102	5.474	13.777	10	2.06E+01	9.10E+01	2.88E+01	2.06E+01	9.10E+01	6.66E+02	6.95E+02	8
103	5.406	13.666	10	1.15E+01	4.81E+01	1.61E+01	1.15E+01	4.81E+01	3.53E+02	3.69E+02	8
104	5.461	13.842	10	4.03E+01	1.57E+02	5.64E+01	4.03E+01	1.57E+02	1.16E+03	1.21E+03	8
105	5.476	13.706	10	1.30E+01	5.77E+01	1.82E+01	1.30E+01	5.77E+01	4.22E+02	4.40E+02	8
106	5.642	13.947	10	3.02E+01	2.69E+02	4.23E+01	3.02E+01	2.69E+02	1.93E+03	1.97E+03	8
107	5.653	13.814	10	1.78E+01	1.03E+02	2.49E+01	1.78E+01	1.03E+02	7.46E+02	7.71E+02	8
108	5.627	14.130	10	5.36E+01	1.25E+03	7.50E+01	5.36E+01	1.25E+03	8.83E+03	8.90E+03	8
109	5.702	14.036	10	2.35E+01	3.83E+02	3.29E+01	2.35E+01	3.83E+02	2.71E+03	2.75E+03	8
110	5.702	12.379	10	1.83E+00	0.00E+00	2.56E+00	1.83E+00	0.00E+00	2.56E+00	5.12E+00	3
111	5.784	12.296	10	1.65E+00	0.00E+00	2.31E+00	1.65E+00	0.00E+00	2.31E+00	4.62E+00	3
112	5.875	12.255	10	1.41E+00	0.00E+00	1.97E+00	1.41E+00	0.00E+00	1.97E+00	3.95E+00	3
113	5.966	12.148	10	9.32E-01	0.00E+00	1.30E+00	9.32E-01	0.00E+00	1.30E+00	2.61E+00	2
120	6.033	14.438	10	2.51E+01	4.91E+02	3.51E+01	2.51E+01	4.91E+02	3.47E+03	3.51E+03	8
121	6.032	12.989	10	8.25E-01	1.68E-01	1.16E+00	8.25E-01	1.68E-01	2.33E+00	3.49E+00	3
122	5.929	12.964	10	1.85E+00	6.20E-01	2.59E+00	1.85E+00	6.20E-01	6.93E+00	9.52E+00	4
123	6.033	12.883	10	7.62E-01	4.03E-02	1.07E+00	7.62E-01	4.03E-02	1.35E+00	2.42E+00	2
124	5.934	12.874	10	1.67E+00	2.92E-01	2.34E+00	1.67E+00	2.92E-01	4.38E+00	6.72E+00	4
125	5.888	13.090	10	2.53E+00	1.77E+00	3.54E+00	2.53E+00	1.77E+00	1.59E+01	1.95E+01	5
126	5.793	13.170	10	3.08E+00	3.18E+00	4.31E+00	3.08E+00	3.18E+00	2.66E+01	3.09E+01	6
127	5.789	13.080	10	2.79E+00	2.09E+00	3.91E+00	2.79E+00	2.09E+00	1.85E+01	2.24E+01	5
128	5.929	13.162	10	2.26E+00	1.85E+00	3.16E+00	2.26E+00	1.85E+00	1.61E+01	1.93E+01	5
129	6.018	13.474	10	1.73E+00	3.36E+00	2.42E+00	1.73E+00	3.36E+00	2.59E+01	2.84E+01	5
130	6.010	13.396	10	1.69E+00	2.69E+00	2.37E+00	1.69E+00	2.69E+00	2.12E+01	2.36E+01	5
131	6.016	13.310	10	1.39E+00	1.66E+00	1.95E+00	1.39E+00	1.66E+00	1.36E+01	1.55E+01	5
132	6.074	13.908	10	1.17E+00	5.11E+00	1.64E+00	1.17E+00	5.11E+00	3.74E+01	3.90E+01	6
133	6.062	13.731	10	1.17E+00	3.47E+00	1.64E+00	1.17E+00	3.47E+00	2.59E+01	2.76E+01	5
134	6.072	13.821	10	1.07E+00	3.74E+00	1.50E+00	1.07E+00	3.74E+00	2.77E+01	2.92E+01	5
189	5.211	12.855	7	2.37E+00	6.78E-01	3.32E+00	2.37E+00	6.78E-01	8.06E+00	1.14E+01	4
190	5.817	12.688	7	1.98E+00	1.46E-01	2.77E+00	1.98E+00	1.46E-01	3.79E+00	6.57E+00	4
191	5.850	12.720	7	1.95E+00	1.72E-01	2.73E+00	1.95E+00	1.72E-01	3.93E+00	6.66E+00	4
192	5.199	13.137	7	2.99E+00	2.67E+00	4.19E+00	2.99E+00	2.67E+00	2.29E+01	2.71E+01	5
193	5.224	13.195	7	3.43E+00	3.91E+00	4.80E+00	3.43E+00	3.91E+00	3.22E+01	3.70E+01	6
194	5.504	12.164	7	1.87E+00	0.00E+00	2.62E+00	1.87E+00	0.00E+00	2.62E+00	5.24E+00	3
195	5.583	12.163	7	1.84E+00	0.00E+00	2.58E+00	1.84E+00	0.00E+00	2.58E+00	5.15E+00	3
196	4.968	13.187	7	1.04E+00	7.36E-01	1.46E+00	1.04E+00	7.36E-01	6.61E+00	8.06E+00	4
197	5.033	13.123	7	1.71E+00	1.14E+00	2.39E+00	1.71E+00	1.14E+00	1.04E+01	1.28E+01	4
198	5.102	14.383	7	5.01E+01	1.37E+03	7.01E+01	5.01E+01	1.37E+03	9.66E+03	9.73E+03	8
199	5.115	14.389	7	4.43E+01	1.30E+03	6.20E+01	4.43E+01	1.30E+03	9.16E+03	9.22E+03	8
210	5.928	14.339	8	6.01E+01	1.63E+03	8.41E+01	6.01E+01	1.63E+03	1.15E+04	1.16E+04	8
211	5.764	13.557	8	5.08E+00	1.61E+01	7.11E+00	5.08E+00	1.61E+01	1.20E+02	1.27E+02	8
212	5.766	13.622	8	6.24E+00	2.14E+01	8.74E+00	6.24E+00	2.14E+01	1.59E+02	1.67E+02	8
213	5.767	13.674	8	7.20E+00	2.72E+01	1.01E+01	7.20E+00	2.72E+01	2.00E+02	2.11E+02	8
214	5.958	13.839	8	5.95E+00	2.71E+01	8.33E+00	5.95E+00	2.71E+01	1.98E+02	2.06E+02	8
215	5.913	13.903	8	1.38E+01	7.23E+01	1.93E+01	1.38E+01	7.23E+01	5.25E+02	5.45E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

216	5.912	13.851	8	1.15E+01	5.50E+01	1.61E+01	1.15E+01	5.50E+01	4.01E+02	4.17E+02	8
231	5.991	14.398	10	2.57E+01	4.69E+02	3.60E+01	2.57E+01	4.69E+02	3.32E+03	3.35E+03	8
232	6.000	14.484	10	2.77E+01	1.02E+03	3.88E+01	2.77E+01	1.02E+03	7.18E+03	7.22E+03	8
233	6.059	14.191	10	5.70E+00	3.98E+01	7.98E+00	5.70E+00	3.98E+01	2.87E+02	2.95E+02	8
234	6.048	14.352	10	1.76E+01	1.84E+02	2.46E+01	1.76E+01	1.84E+02	1.31E+03	1.34E+03	8
235	5.928	14.253	10	4.95E+01	9.88E+02	6.93E+01	4.95E+01	9.88E+02	6.99E+03	7.05E+03	8
236	5.995	14.318	10	2.12E+01	4.75E+02	2.97E+01	2.12E+01	4.75E+02	3.35E+03	3.38E+03	8
240	5.917	14.848	10	2.69E+01	5.07E+02	3.77E+01	2.69E+01	5.07E+02	3.59E+03	3.62E+03	8
241	5.911	14.774	10	3.19E+01	9.04E+02	4.47E+01	3.19E+01	9.04E+02	6.37E+03	6.42E+03	8
242	5.917	14.700	10	3.80E+01	6.88E+02	5.32E+01	3.80E+01	6.88E+02	4.87E+03	4.92E+03	8
269	5.451	13.254	10	4.20E+00	7.04E+00	5.88E+00	4.20E+00	7.04E+00	5.52E+01	6.10E+01	7
270	5.514	13.209	10	4.23E+00	6.03E+00	5.92E+00	4.23E+00	6.03E+00	4.81E+01	5.41E+01	7
271	5.566	13.193	10	4.04E+00	5.23E+00	5.66E+00	4.04E+00	5.23E+00	4.23E+01	4.79E+01	6
295	5.413	12.882	10	2.64E+00	9.42E-01	3.70E+00	2.64E+00	9.42E-01	1.03E+01	1.40E+01	4
296	5.537	12.816	10	2.80E+00	8.35E-01	3.92E+00	2.80E+00	8.35E-01	9.77E+00	1.37E+01	4
297	5.496	12.799	10	2.73E+00	8.33E-01	3.82E+00	2.73E+00	8.33E-01	9.65E+00	1.35E+01	4
298	5.561	12.909	10	2.99E+00	1.31E+00	4.19E+00	2.99E+00	1.31E+00	1.34E+01	1.75E+01	5
299	5.615	12.839	10	2.67E+00	7.88E-01	3.74E+00	2.67E+00	7.88E-01	9.25E+00	1.30E+01	4
300	5.608	12.984	10	3.07E+00	1.76E+00	4.30E+00	3.07E+00	1.76E+00	1.66E+01	2.09E+01	5
303	6.276	11.651	10	4.39E-03	0.00E+00	6.15E-03	4.39E-03	0.00E+00	6.15E-03	1.23E-02	1
304	5.755	11.682	10	1.27E+00	0.00E+00	1.78E+00	1.27E+00	0.00E+00	1.78E+00	3.56E+00	3
305	5.635	11.734	10	1.45E+00	0.00E+00	2.03E+00	1.45E+00	0.00E+00	2.03E+00	4.06E+00	3
306	5.353	11.802	10	1.50E+00	0.00E+00	2.10E+00	1.50E+00	0.00E+00	2.10E+00	4.20E+00	3
307	5.207	11.849	10	1.35E+00	0.00E+00	1.89E+00	1.35E+00	0.00E+00	1.89E+00	3.78E+00	3
308	4.846	12.296	10	1.19E-01	0.00E+00	1.67E-01	1.19E-01	0.00E+00	1.67E-01	3.33E-01	2
309	5.181	11.974	10	1.36E+00	0.00E+00	1.90E+00	1.36E+00	0.00E+00	1.90E+00	3.81E+00	3
310	4.753	12.292	10	6.52E-03	0.00E+00	9.13E-03	6.52E-03	0.00E+00	9.13E-03	1.83E-02	1
311	4.701	12.491	10	5.81E-05	0.00E+00	8.13E-05	5.81E-05	0.00E+00	8.13E-05	1.63E-04	1
320	4.990	15.031	10	4.36E-03	0.00E+00	6.10E-03	4.36E-03	0.00E+00	6.10E-03	1.22E-02	1
321	5.097	15.098	10	1.51E+00	0.00E+00	2.11E+00	1.51E+00	0.00E+00	2.11E+00	4.23E+00	3
325	5.702	14.442	10	5.30E+01	1.32E+03	7.42E+01	5.30E+01	1.32E+03	9.31E+03	9.39E+03	8
326	5.689	14.515	10	5.01E+01	1.06E+03	7.01E+01	5.01E+01	1.06E+03	7.49E+03	7.56E+03	8
327	5.512	14.539	10	5.43E+01	1.00E+03	7.60E+01	5.43E+01	1.00E+03	7.08E+03	7.15E+03	8
328	5.636	14.371	10	4.42E+01	9.21E+02	6.19E+01	4.42E+01	9.21E+02	6.51E+03	6.57E+03	8
329	5.419	13.723	10	1.49E+01	7.10E+01	2.09E+01	1.49E+01	7.10E+01	5.18E+02	5.39E+02	8
330	5.408	13.795	10	2.28E+01	1.19E+02	3.19E+01	2.28E+01	1.19E+02	8.65E+02	8.97E+02	8
331	5.493	13.630	10	9.21E+00	3.69E+01	1.29E+01	9.21E+00	3.69E+01	2.71E+02	2.84E+02	8
332	5.361	13.699	10	1.38E+01	6.13E+01	1.93E+01	1.38E+01	6.13E+01	4.48E+02	4.68E+02	8
333	5.363	13.843	10	2.73E+01	1.87E+02	3.82E+01	2.73E+01	1.87E+02	1.35E+03	1.39E+03	8
334	5.691	13.943	10	1.98E+01	2.16E+02	2.77E+01	1.98E+01	2.16E+02	1.54E+03	1.57E+03	8
335	5.690	14.073	10	2.86E+01	5.08E+02	4.00E+01	2.86E+01	5.08E+02	3.60E+03	3.64E+03	8
336	5.654	14.156	10	4.29E+01	1.19E+03	6.01E+01	4.29E+01	1.19E+03	8.39E+03	8.45E+03	8
337	5.627	13.811	10	2.01E+01	1.07E+02	2.81E+01	2.01E+01	1.07E+02	7.77E+02	8.05E+02	8
338	5.888	12.262	10	1.37E+00	0.00E+00	1.92E+00	1.37E+00	0.00E+00	1.92E+00	3.84E+00	3
339	5.993	12.248	10	8.21E-01	0.00E+00	1.15E+00	8.21E-01	0.00E+00	1.15E+00	2.30E+00	2
340	5.752	12.293	10	1.68E+00	0.00E+00	2.35E+00	1.68E+00	0.00E+00	2.35E+00	4.70E+00	3
341	5.706	12.340	10	1.79E+00	0.00E+00	2.51E+00	1.79E+00	0.00E+00	2.51E+00	5.01E+00	3
348	6.048	14.515	10	3.16E+01	9.94E+02	4.42E+01	3.16E+01	9.94E+02	7.00E+03	7.05E+03	8
349	6.052	12.911	10	6.03E-01	0.00E+00	8.44E-01	6.03E-01	0.00E+00	8.44E-01	1.69E+00	2
350	6.039	13.007	10	7.66E-01	1.70E-01	1.07E+00	7.66E-01	1.70E-01	2.26E+00	3.33E+00	3
351	5.955	12.889	10	1.50E+00	2.14E-01	2.10E+00	1.50E+00	2.14E-01	3.60E+00	5.70E+00	3
352	5.960	12.980	10	1.56E+00	4.31E-01	2.18E+00	1.56E+00	4.31E-01	5.20E+00	7.39E+00	4
353	5.884	13.058	10	2.47E+00	1.54E+00	3.46E+00	2.47E+00	1.54E+00	1.42E+01	1.77E+01	5
354	5.911	13.172	10	2.55E+00	2.36E+00	3.57E+00	2.55E+00	2.36E+00	2.01E+01	2.37E+01	5
355	5.823	13.093	10	2.79E+00	2.09E+00	3.91E+00	2.79E+00	2.09E+00	1.85E+01	2.24E+01	5
356	5.820	13.172	10	3.06E+00	3.07E+00	4.28E+00	3.06E+00	3.07E+00	2.58E+01	3.01E+01	6
357	6.039	13.482	10	1.28E+00	2.27E+00	1.79E+00	1.28E+00	2.27E+00	1.77E+01	1.95E+01	5
358	6.038	13.406	10	1.18E+00	1.70E+00	1.65E+00	1.18E+00	1.70E+00	1.36E+01	1.52E+01	5
359	6.041	13.323	10	1.01E+00	1.11E+00	1.41E+00	1.01E+00	1.11E+00	9.18E+00	1.06E+01	4
360	6.145	13.753	10	2.41E-02	2.54E-02	3.37E-02	2.41E-02	2.54E-02	2.12E-01	2.45E-01	1
361	6.165	13.823	10	3.03E-03	0.00E+00	4.24E-03	3.03E-03	0.00E+00	4.24E-03	8.48E-03	1
362	6.119	13.900	10	8.17E-02	1.40E-01	1.14E-01	8.17E-02	1.40E-01	1.09E+00	1.21E+00	2
416	5.798	12.686	7	2.01E+00	1.66E-01	2.81E+00	2.01E+00	1.66E-01	3.98E+00	6.79E+00	4
417	5.881	12.714	7	1.81E+00	8.79E-02	2.53E+00	1.81E+00	8.79E-02	3.15E+00	5.68E+00	3
418	5.228	13.115	7	3.13E+00	2.67E+00	4.38E+00	3.13E+00	2.67E+00	2.31E+01	2.75E+01	5
419	5.264	13.099	7	3.25E+00	2.69E+00	4.55E+00	3.25E+00	2.69E+00	2.34E+01	2.79E+01	5
420	5.601	12.207	7	1.86E+00	0.00E+00	2.60E+00	1.86E+00	0.00E+00	2.60E+00	5.21E+00	3
421	5.517	12.227	7	1.93E+00	0.00E+00	2.70E+00	1.93E+00	0.00E+00	2.70E+00	5.40E+00	3
422	4.992	13.086	7	1.24E+00	6.78E-01	1.74E+00	1.24E+00	6.78E-01	6.48E+00	8.22E+00	4
423	4.962	13.219	7	9.84E-01	7.42E-01	1.38E+00	9.84E-01	7.42E-01	6.57E+00	7.95E+00	4
424	5.069	14.379	7	6.20E+01	1.63E+03	8.68E+01	6.20E+01	1.63E+03	1.15E+04	1.16E+04	8
425	5.100	14.393	7	5.05E+01	1.43E+03	7.07E+01	5.05E+01	1.43E+03	1.01E+04	1.02E+04	8
439	5.211	12.851	8	2.36E+00	6.65E-01	3.30E+00	2.36E+00	6.65E-01	7.96E+00	1.13E+01	4
442	5.998	14.225	8	1.67E+01	2.34E+02	2.34E+01	1.67E+01	2.34E+02	1.66E+03	1.68E+03	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

443	5.724	13.641	8	6.35E+00	2.56E+01	8.89E+00	6.35E+00	2.56E+01	1.88E+02	1.97E+02	8
444	5.772	13.525	8	4.95E+00	1.48E+01	6.93E+00	4.95E+00	1.48E+01	1.11E+02	1.17E+02	8
445	5.724	13.585	8	5.55E+00	2.01E+01	7.77E+00	5.55E+00	2.01E+01	1.48E+02	1.56E+02	8
446	5.932	13.871	8	9.49E+00	4.67E+01	1.33E+01	9.49E+00	4.67E+01	3.40E+02	3.53E+02	8
447	5.920	13.941	8	1.42E+01	8.15E+01	1.99E+01	1.42E+01	8.15E+01	5.90E+02	6.10E+02	8
448	5.927	13.817	8	8.25E+00	3.77E+01	1.16E+01	8.25E+00	3.77E+01	2.75E+02	2.87E+02	8
Case 2: Protected 720 rounds at aimpoint (5.65, 14.75)											
1	6.093	14.476	10	8.03E-03	2.69E+01	1.12E-02	6.82E-02	1.67E+02	1.17E+03	1.17E+03	8
2	6.092	14.323	10	1.99E-02	1.28E+02	2.79E-02	2.34E-01	8.69E+02	6.08E+03	6.08E+03	8
3	6.056	14.272	10	1.15E-01	2.48E+02	1.61E-01	1.02E+00	9.02E+02	6.32E+03	6.32E+03	8
4	5.928	14.340	10	1.17E-01	1.31E+02	1.64E-01	6.64E-01	8.83E+02	6.18E+03	6.18E+03	8
5	5.996	14.233	10	1.37E-01	5.32E+01	1.92E-01	9.32E-01	6.96E+02	4.87E+03	4.87E+03	8
6	5.940	14.453	10	8.77E-02	1.24E+01	1.23E-01	4.58E-01	8.42E+02	5.89E+03	5.89E+03	8
10	5.849	14.797	10	0.00E+00	0.00E+00	0.00E+00	2.36E-04	7.80E-01	5.46E+00	5.46E+00	3
11	5.840	14.745	10	2.41E-03	7.55E-01	3.37E-03	1.27E-02	1.32E+02	9.24E+02	9.24E+02	8
40	5.550	13.245	10	2.83E-03	0.00E+00	3.96E-03	1.16E+00	7.82E+00	5.64E+01	5.64E+01	7
41	5.474	13.201	10	3.88E-04	0.00E+00	5.43E-04	1.08E+00	7.95E+00	5.72E+01	5.72E+01	7
42	5.507	13.288	10	2.46E-03	0.00E+00	3.44E-03	1.40E+00	1.91E+01	1.36E+02	1.36E+02	8
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	4.17E-01	4.32E-01	3.61E+00	3.61E+00	3
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	5.83E-01	2.42E+00	1.78E+01	1.78E+01	5
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	6.11E-01	1.03E+00	8.07E+00	8.07E+00	4
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	4.34E-01	9.09E-01	6.97E+00	6.97E+00	4
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	6.69E-01	1.66E+00	1.26E+01	1.26E+01	4
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	4.75E-01	1.20E+00	9.07E+00	9.07E+00	4
97	5.610	14.388	10	1.89E-01	9.20E+00	2.65E-01	9.44E-01	6.79E+02	4.75E+03	4.75E+03	8
98	5.554	14.447	10	1.17E-02	3.26E+00	1.64E-02	7.75E-01	6.48E+02	4.54E+03	4.54E+03	8
99	5.616	14.500	10	1.41E-01	8.11E+01	1.97E-01	5.78E-01	5.17E+02	3.62E+03	3.62E+03	8
100	5.667	14.564	10	1.79E-01	3.92E+02	2.51E-01	6.10E-01	1.43E+03	1.00E+04	1.00E+04	8
101	5.392	13.905	10	1.81E-01	1.98E+01	2.53E-01	1.79E+00	3.72E+02	2.61E+03	2.61E+03	8
102	5.474	13.777	10	1.13E-01	1.09E+01	1.58E-01	2.18E+00	2.84E+02	1.99E+03	1.99E+03	8
103	5.406	13.666	10	6.43E-02	4.66E+00	9.00E-02	2.00E+00	7.75E+02	5.43E+03	5.43E+03	8
104	5.461	13.842	10	6.50E-02	4.78E+00	9.10E-02	2.04E+00	6.37E+02	4.46E+03	4.46E+03	8
105	5.476	13.706	10	1.56E-01	1.41E+02	2.18E-01	2.31E+00	6.04E+02	4.23E+03	4.23E+03	8
106	5.642	13.947	10	9.54E-03	4.61E-01	1.34E-02	1.61E+00	1.38E+02	9.68E+02	9.68E+02	8
107	5.653	13.814	10	3.72E-02	2.43E+00	5.21E-02	1.78E+00	8.45E+02	5.92E+03	5.92E+03	8
108	5.627	14.130	10	1.69E-01	1.28E+02	2.37E-01	1.57E+00	4.85E+02	3.40E+03	3.40E+03	8
109	5.702	14.036	10	3.47E-01	2.07E+02	4.86E-01	2.18E+00	7.51E+02	5.26E+03	5.26E+03	8
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	1.00E-01	0.00E+00	1.40E-01	1.40E-01	1
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	3.99E-02	0.00E+00	5.59E-02	5.59E-02	1
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	3.20E-02	0.00E+00	4.48E-02	4.48E-02	1
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	3.40E-03	3.40E-03	1
120	6.033	14.438	10	6.12E-02	7.47E+01	8.57E-02	3.95E-01	5.02E+02	3.51E+03	3.51E+03	8
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	6.09E-01	1.42E+00	1.08E+01	1.08E+01	4
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	6.66E-01	2.14E+00	1.59E+01	1.59E+01	5
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	4.59E-01	6.26E-01	5.02E+00	5.02E+00	3
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	5.51E-01	1.14E+00	8.75E+00	8.75E+00	4
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	7.88E-01	4.13E+00	3.00E+01	3.00E+01	6
126	5.793	13.170	10	2.44E-04	0.00E+00	3.42E-04	1.04E+00	3.54E+00	2.62E+01	2.62E+01	5
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	8.07E-01	1.92E+00	1.46E+01	1.46E+01	4
128	5.929	13.162	10	4.06E-04	0.00E+00	5.68E-04	1.07E+00	7.85E+00	5.64E+01	5.64E+01	7
129	6.018	13.474	10	5.29E-02	0.00E+00	7.41E-02	2.07E+00	3.53E+01	2.50E+02	2.50E+02	8
130	6.010	13.396	10	2.20E-02	0.00E+00	3.08E-02	1.72E+00	2.01E+01	1.43E+02	1.43E+02	8
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.20E+01	8.59E+01	8.59E+01	8
132	6.074	13.908	10	1.71E-01	1.80E+02	2.39E-01	1.66E+01	8.81E+02	6.17E+03	6.17E+03	8
133	6.062	13.731	10	3.05E-01	4.95E+00	4.27E-01	2.67E+00	2.02E+02	1.42E+03	1.42E+03	8
134	6.072	13.821	10	2.47E-01	1.17E+02	3.46E-01	2.11E+00	5.10E+02	3.57E+03	3.57E+03	8
189	5.211	12.855	7	0.00E+00	0.00E+00	0.00E+00	2.77E-01	2.17E-01	1.91E+00	1.91E+00	2
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	2.29E-01	1.15E-01	1.13E+00	1.13E+00	2
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	2.63E-01	2.57E-01	2.17E+00	2.17E+00	2
192	5.199	13.137	7	0.00E+00	0.00E+00	0.00E+00	5.04E-01	1.62E+00	1.20E+01	1.20E+01	4
193	5.224	13.195	7	0.00E+00	0.00E+00	0.00E+00	6.78E-01	3.16E+00	2.31E+01	2.31E+01	5
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	1.65E-02	1.65E-02	1
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	2.16E-02	0.00E+00	3.02E-02	3.02E-02	1
196	4.968	13.187	7	0.00E+00	0.00E+00	0.00E+00	3.54E-03	0.00E+00	4.96E-03	4.96E-03	1
197	5.033	13.123	7	0.00E+00	0.00E+00	0.00E+00	4.57E-02	0.00E+00	6.40E-02	6.40E-02	1
198	5.102	14.383	7	3.48E-04	6.63E-01	4.87E-04	1.67E-03	1.79E+01	1.25E+02	1.25E+02	8
199	5.115	14.389	7	2.51E-03	4.21E+00	3.51E-03	1.20E-02	1.38E+02	9.66E+02	9.66E+02	8
210	5.928	14.339	8	1.17E-01	1.33E+02	1.64E-01	6.67E-01	9.06E+02	6.34E+03	6.34E+03	8
211	5.764	13.557	8	1.39E-02	1.15E-01	1.95E-02	2.27E+00	1.55E+02	1.09E+03	1.09E+03	8
212	5.766	13.622	8	6.36E-02	9.14E-01	8.90E-02	2.37E+00	2.80E+02	1.96E+03	1.96E+03	8
213	5.767	13.674	8	1.01E-01	5.04E+00	1.41E-01	2.45E+00	4.36E+02	3.06E+03	3.06E+03	8
214	5.958	13.839	8	1.83E-01	5.94E+01	2.56E-01	2.34E+00	1.95E+03	1.37E+04	1.37E+04	8
215	5.913	13.903	8	2.31E-01	1.02E+01	3.23E-01	2.26E+00	3.16E+02	2.22E+03	2.22E+03	8
216	5.912	13.851	8	2.25E-01	2.05E+01	3.15E-01	2.23E+00	6.47E+02	4.53E+03	4.53E+03	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

231	5.991	14.398	10	5.64E-02	4.05E+00	7.90E-02	2.79E-01	6.48E+02	4.54E+03	4.54E+03	8
232	6.000	14.484	10	2.11E-02	2.21E-01	2.95E-02	9.19E-02	2.62E+01	1.84E+02	1.84E+02	8
233	6.059	14.191	10	1.23E-01	1.96E+02	1.72E-01	1.23E+00	8.78E+02	6.15E+03	6.15E+03	8
234	6.048	14.352	10	1.10E-01	8.54E+01	1.54E-01	8.13E-01	6.22E+02	4.36E+03	4.36E+03	8
235	5.928	14.253	10	1.03E-01	1.08E+02	1.44E-01	9.17E-01	1.22E+03	8.54E+03	8.54E+03	8
236	5.995	14.318	10	8.57E-02	3.98E+01	1.20E-01	4.85E-01	5.50E+02	3.85E+03	3.85E+03	8
241	5.911	14.774	10	0.00E+00	0.00E+00	0.00E+00	2.30E-05	0.00E+00	3.22E-05	3.22E-05	1
242	5.917	14.700	10	9.12E-03	3.83E-04	1.28E-02	3.40E-02	1.52E+00	1.07E+01	1.07E+01	4
269	5.451	13.254	10	3.29E-05	0.00E+00	4.61E-05	1.15E+00	6.98E+00	5.05E+01	5.05E+01	7
270	5.514	13.209	10	1.17E-03	0.00E+00	1.64E-03	1.16E+00	1.04E+01	7.44E+01	7.44E+01	7
271	5.566	13.193	10	1.25E-03	0.00E+00	1.75E-03	1.24E+00	1.05E+01	7.52E+01	7.52E+01	8
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	4.57E-01	6.86E-01	5.44E+00	5.44E+00	3
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	4.26E-01	5.58E-01	4.50E+00	4.50E+00	3
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	4.31E-01	8.19E-01	6.34E+00	6.34E+00	4
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	6.02E-01	9.92E-01	7.79E+00	7.79E+00	4
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	6.03E-01	1.05E+00	8.19E+00	8.19E+00	4
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	9.78E-01	4.34E+00	3.17E+01	3.17E+01	6
325	5.702	14.442	10	1.51E-01	1.57E+02	2.11E-01	9.33E-01	7.74E+02	5.42E+03	5.42E+03	8
326	5.689	14.515	10	1.72E-01	1.00E+02	2.41E-01	7.24E-01	1.07E+03	7.49E+03	7.49E+03	8
327	5.512	14.539	10	5.37E-02	7.81E+01	7.52E-02	2.66E-01	5.21E+02	3.65E+03	3.65E+03	8
328	5.636	14.371	10	4.41E-01	1.74E+01	6.17E-01	1.60E+00	4.21E+02	2.95E+03	2.95E+03	8
329	5.419	13.723	10	5.85E-02	1.38E+01	8.19E-02	1.98E+00	1.05E+03	7.35E+03	7.35E+03	8
330	5.408	13.795	10	8.90E-02	2.30E+00	1.25E-01	1.86E+00	1.08E+03	7.56E+03	7.56E+03	8
331	5.493	13.630	10	2.15E-01	1.50E+02	3.01E-01	2.42E+00	6.01E+02	4.21E+03	4.21E+03	8
332	5.361	13.699	10	2.24E-02	3.34E-02	3.14E-02	1.47E+00	6.04E+02	4.23E+03	4.23E+03	8
333	5.363	13.843	10	5.82E-02	4.50E+00	8.15E-02	1.38E+00	2.91E+02	2.04E+03	2.04E+03	8
334	5.691	13.943	10	3.90E-01	3.57E+02	5.46E-01	2.44E+00	1.49E+03	1.04E+04	1.04E+04	8
335	5.690	14.073	10	2.73E-01	2.90E+02	3.82E-01	1.96E+00	9.18E+02	6.43E+03	6.43E+03	8
336	5.654	14.156	10	2.48E-01	2.98E+02	3.47E-01	1.68E+00	9.81E+02	6.87E+03	6.87E+03	8
337	5.627	13.811	10	2.53E-02	5.08E+00	3.54E-02	1.51E+00	1.27E+03	8.89E+03	8.89E+03	8
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	3.41E-02	0.00E+00	4.77E-02	4.77E-02	1
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	1.77E-02	0.00E+00	2.48E-02	2.48E-02	1
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	4.47E-02	0.00E+00	6.26E-02	6.26E-02	1
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	8.03E-02	0.00E+00	1.12E-01	1.12E-01	1
348	6.048	14.515	10	3.88E-02	3.07E+02	5.43E-02	2.26E-01	1.19E+03	8.33E+03	8.33E+03	8
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	4.60E-01	5.49E-01	4.49E+00	4.49E+00	3
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	6.34E-01	1.51E+00	1.15E+01	1.15E+01	4
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	5.81E-01	1.31E+00	9.98E+00	9.98E+00	4
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	7.13E-01	2.24E+00	1.67E+01	1.67E+01	5
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	7.25E-01	3.44E+00	2.51E+01	2.51E+01	5
354	5.911	13.172	10	1.24E-03	0.00E+00	1.74E-03	1.01E+00	7.45E+00	5.36E+01	5.36E+01	7
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	7.70E-01	2.13E+00	1.60E+01	1.60E+01	5
356	5.820	13.172	10	5.53E-04	0.00E+00	7.74E-04	9.57E-01	3.52E+00	2.60E+01	2.60E+01	5
357	6.039	13.482	10	3.81E-02	0.00E+00	5.33E-02	2.04E+00	3.75E+01	2.65E+02	2.65E+02	8
358	6.038	13.406	10	1.65E-02	0.00E+00	2.31E-02	1.72E+00	2.17E+01	1.54E+02	1.54E+02	8
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	1.41E+00	1.31E+01	9.37E+01	9.37E+01	8
360	6.145	13.753	10	2.36E-01	7.47E+00	3.30E-01	1.99E+00	7.87E+01	5.54E+02	5.54E+02	8
361	6.165	13.823	10	1.42E-01	9.71E+00	1.99E-01	1.55E+00	9.08E+01	6.38E+02	6.38E+02	8
362	6.119	13.900	10	1.14E-01	2.32E+02	1.60E-01	1.27E+00	9.37E+02	6.56E+03	6.56E+03	8
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	2.23E-01	6.56E-02	7.71E-01	7.71E-01	2
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	3.03E-01	2.60E-01	2.24E+00	2.24E+00	2
418	5.228	13.115	7	0.00E+00	0.00E+00	0.00E+00	5.87E-01	2.22E+00	1.64E+01	1.64E+01	5
419	5.264	13.099	7	0.00E+00	0.00E+00	0.00E+00	6.52E-01	2.47E+00	1.82E+01	1.82E+01	5
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	4.22E-02	0.00E+00	5.91E-02	5.91E-02	1
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	3.58E-02	0.00E+00	5.01E-02	5.01E-02	1
422	4.992	13.086	7	0.00E+00	0.00E+00	0.00E+00	9.54E-03	0.00E+00	1.34E-02	1.34E-02	1
423	4.962	13.219	7	0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	2.98E-03	2.98E-03	1
424	5.069	14.379	7	6.25E-08	0.00E+00	8.75E-08	6.66E-07	0.00E+00	9.32E-07	1.02E-06	1
425	5.100	14.393	7	1.51E-07	0.00E+00	2.11E-07	1.61E-06	0.00E+00	2.25E-06	2.47E-06	1
439	5.211	12.851	8	0.00E+00	0.00E+00	0.00E+00	2.74E-01	1.96E-01	1.76E+00	1.76E+00	2
442	5.998	14.225	8	1.47E-01	5.49E+01	2.06E-01	9.80E-01	8.08E+02	5.66E+03	5.66E+03	8
443	5.724	13.641	8	2.35E-01	2.99E+01	3.29E-01	2.69E+00	3.17E+02	2.22E+03	2.22E+03	8
444	5.772	13.525	8	8.17E-03	1.24E-01	1.14E-02	2.11E+00	1.08E+02	7.59E+02	7.59E+02	8
445	5.724	13.585	8	1.56E-01	1.80E+01	2.18E-01	2.51E+00	1.99E+02	1.40E+03	1.40E+03	8
446	5.932	13.871	8	1.60E-01	1.34E+01	2.24E-01	2.11E+00	9.44E+02	6.61E+03	6.61E+03	8
447	5.920	13.941	8	2.01E-01	1.41E+01	2.81E-01	2.16E+00	4.70E+02	3.29E+03	3.29E+03	8
448	5.927	13.817	8	1.88E-01	9.86E+01	2.63E-01	2.22E+00	1.30E+03	9.10E+03	9.10E+03	8

VX 250kg Bomb
Light Attack
Height of Release: 70m

Inhalation	Percutaneous	Total
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Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Vapor Exposure (mg-min/m ³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m ³)	Equivalent Exposure (mg-min/m ³)	Injury Severity Category
Case 1: Unprotected 2 rounds at aimpoint (5.85, 16.40)											
1	6.093	14.476	10	3.45E-02	5.30E-01	4.83E-02	3.45E-02	5.30E-01	3.76E+00	3.81E+00	3
2	6.092	14.323	10	4.36E-02	6.64E-01	6.10E-02	4.36E-02	6.64E-01	4.71E+00	4.77E+00	3
3	6.056	14.272	10	2.41E-01	3.47E+00	3.37E-01	2.41E-01	3.47E+00	2.46E+01	2.50E+01	5
4	5.928	14.340	10	1.23E-01	1.81E+00	1.72E-01	1.23E-01	1.81E+00	1.28E+01	1.30E+01	4
5	5.996	14.233	10	6.03E-01	8.48E+00	8.44E-01	6.03E-01	8.48E+00	6.02E+01	6.10E+01	7
6	5.940	14.453	10	2.41E-01	3.70E+00	3.37E-01	2.41E-01	3.70E+00	2.62E+01	2.66E+01	5
10	5.849	14.797	10	2.19E-03	3.84E-02	3.07E-03	2.19E-03	3.84E-02	2.72E-01	2.75E-01	2
11	5.840	14.745	10	2.54E-02	4.32E-01	3.56E-02	2.54E-02	4.32E-01	3.06E+00	3.10E+00	3
12	5.853	14.870	10	1.21E-05	0.00E+00	1.69E-05	1.21E-05	0.00E+00	1.69E-05	1.61E-05	1
35	5.984	15.987	10	3.61E+01	1.61E+03	5.05E+01	3.61E+01	1.61E+03	1.13E+04	1.14E+04	8
71	5.648	12.900	10	1.64E-02	2.40E-01	2.30E-02	1.64E-02	2.40E-01	1.70E+00	1.73E+00	2
76	5.720	11.676	10	4.46E-06	8.37E-02	6.24E-06	4.46E-06	8.37E-02	5.86E-01	5.86E-01	2
96	5.747	15.847	10	6.29E+01	2.27E+03	8.81E+01	6.29E+01	2.27E+03	1.60E+04	1.61E+04	8
97	5.610	14.388	10	2.39E-06	0.00E+00	3.35E-06	2.39E-06	0.00E+00	3.35E-06	6.69E-06	1
99	5.616	14.500	10	1.91E-06	0.00E+00	2.67E-06	1.91E-06	0.00E+00	2.67E-06	5.35E-06	1
100	5.667	14.564	10	6.29E-02	9.84E-01	8.81E-02	6.29E-02	9.84E-01	6.98E+00	7.06E+00	4
106	5.642	13.947	10	2.43E-02	3.24E-01	3.40E-02	2.43E-02	3.24E-01	2.30E+00	2.34E+00	2
107	5.653	13.814	10	4.22E-02	5.60E-01	5.91E-02	4.22E-02	5.60E-01	3.98E+00	4.04E+00	3
108	5.627	14.130	10	1.94E-03	3.26E-02	2.72E-03	1.94E-03	3.26E-02	2.31E-01	2.34E-01	1
109	5.702	14.036	10	2.21E-01	3.08E+00	3.09E-01	2.21E-01	3.08E+00	2.19E+01	2.22E+01	5
110	5.702	12.379	10	1.78E-02	2.30E-01	2.49E-02	1.78E-02	2.30E-01	1.63E+00	1.66E+00	2
111	5.784	12.296	10	1.78E-02	2.31E-01	2.49E-02	1.78E-02	2.31E-01	1.64E+00	1.67E+00	2
113	5.966	12.148	10	1.78E-02	1.90E-01	2.49E-02	1.78E-02	1.90E-01	1.35E+00	1.38E+00	2
120	6.033	14.438	10	6.49E-01	9.37E+00	9.09E-01	6.49E-01	9.37E+00	6.65E+01	6.74E+01	7
121	6.032	12.989	10	7.01E-02	7.64E-01	9.81E-02	7.01E-02	7.64E-01	5.45E+00	5.54E+00	3
122	5.929	12.964	10	4.04E-02	4.91E-01	5.66E-02	4.04E-02	4.91E-01	3.49E+00	3.55E+00	3
123	6.033	12.883	10	5.76E-02	6.30E-01	8.06E-02	5.76E-02	6.30E-01	4.49E+00	4.57E+00	3
124	5.934	12.874	10	4.05E-02	4.46E-01	5.67E-02	4.05E-02	4.46E-01	3.18E+00	3.24E+00	3
125	5.888	13.090	10	2.71E-02	3.02E-01	3.79E-02	2.71E-02	3.02E-01	2.15E+00	2.19E+00	2
126	5.793	13.170	10	7.16E-02	8.13E-01	1.00E-01	7.16E-02	8.13E-01	5.79E+00	5.89E+00	3
127	5.789	13.080	10	6.70E-02	7.59E-01	9.38E-02	6.70E-02	7.59E-01	5.41E+00	5.50E+00	3
128	5.929	13.162	10	5.59E-02	6.22E-01	7.83E-02	5.59E-02	6.22E-01	4.43E+00	4.51E+00	3
129	6.018	13.474	10	1.31E-01	1.57E+00	1.83E-01	1.31E-01	1.57E+00	1.12E+01	1.14E+01	4
130	6.010	13.396	10	1.16E-01	1.41E+00	1.62E-01	1.16E-01	1.41E+00	1.00E+01	1.02E+01	4
131	6.016	13.310	10	1.08E-01	1.27E+00	1.51E-01	1.08E-01	1.27E+00	9.04E+00	9.19E+00	4
132	6.074	13.908	10	9.75E-02	1.25E+00	1.37E-01	9.75E-02	1.25E+00	8.89E+00	9.02E+00	4
133	6.062	13.731	10	1.13E-01	1.39E+00	1.58E-01	1.13E-01	1.39E+00	9.89E+00	1.00E+01	4
134	6.072	13.821	10	9.82E-02	1.21E+00	1.37E-01	9.82E-02	1.21E+00	8.61E+00	8.74E+00	4
190	5.817	12.688	7	2.57E-02	3.10E-01	3.60E-02	2.57E-02	3.10E-01	2.21E+00	2.24E+00	2
191	5.850	12.720	7	1.07E-02	1.94E-01	1.50E-02	1.07E-02	1.94E-01	1.37E+00	1.39E+00	2
210	5.928	14.339	8	1.23E-01	1.81E+00	1.72E-01	1.23E-01	1.81E+00	1.28E+01	1.30E+01	4
211	5.764	13.557	8	1.50E-01	1.90E+00	2.10E-01	1.50E-01	1.90E+00	1.35E+01	1.37E+01	4
212	5.766	13.622	8	1.66E-01	2.13E+00	2.32E-01	1.66E-01	2.13E+00	1.51E+01	1.54E+01	5
213	5.767	13.674	8	1.83E-01	2.36E+00	2.56E-01	1.83E-01	2.36E+00	1.68E+01	1.70E+01	5
214	5.958	13.839	8	1.85E-01	2.44E+00	2.59E-01	1.85E-01	2.44E+00	1.73E+01	1.76E+01	5
215	5.913	13.903	8	6.60E-02	8.47E-01	9.24E-02	6.60E-02	8.47E-01	6.02E+00	6.11E+00	4
216	5.912	13.851	8	6.25E-02	7.89E-01	8.75E-02	6.25E-02	7.89E-01	5.61E+00	5.70E+00	3
231	5.991	14.398	10	9.18E-01	1.20E+01	1.29E+00	9.18E-01	1.20E+01	8.53E+01	8.66E+01	8
232	6.000	14.484	10	1.27E+00	1.70E+01	1.78E+00	1.27E+00	1.70E+01	1.21E+02	1.23E+02	8
233	6.059	14.191	10	2.06E-01	2.85E+00	2.88E-01	2.06E-01	2.85E+00	2.02E+01	2.05E+01	5
234	6.048	14.352	10	3.33E-01	4.96E+00	4.66E-01	3.33E-01	4.96E+00	3.52E+01	3.57E+01	6
235	5.928	14.253	10	1.20E-01	1.75E+00	1.68E-01	1.20E-01	1.75E+00	1.24E+01	1.26E+01	4
236	5.995	14.318	10	7.87E-01	1.05E+01	1.10E+00	7.87E-01	1.05E+01	7.46E+01	7.57E+01	8
240	5.917	14.848	10	3.06E-02	5.37E-01	4.28E-02	3.06E-02	5.37E-01	3.80E+00	3.84E+00	3
241	5.911	14.774	10	2.56E-02	4.33E-01	3.58E-02	2.56E-02	4.33E-01	3.07E+00	3.10E+00	3
242	5.917	14.700	10	4.86E-02	7.77E-01	6.80E-02	4.86E-02	7.77E-01	5.51E+00	5.58E+00	3
264	6.044	15.980	10	3.99E-01	1.70E+01	5.59E-01	3.99E-01	1.70E+01	1.20E+02	1.20E+02	8
299	5.615	12.839	10	3.59E-06	6.50E-02	5.03E-06	3.59E-06	6.50E-02	4.55E-01	4.55E-01	2
300	5.608	12.984	10	1.91E-06	3.98E-02	2.67E-06	1.91E-06	3.98E-02	2.79E-01	2.79E-01	2
304	5.755	11.682	10	5.84E-03	1.13E-01	8.18E-03	5.84E-03	1.13E-01	7.99E-01	8.07E-01	2
325	5.702	14.442	10	3.84E-01	5.71E+00	5.38E-01	3.84E-01	5.71E+00	4.05E+01	4.10E+01	6
326	5.689	14.515	10	2.48E-01	3.82E+00	3.47E-01	2.48E-01	3.82E+00	2.71E+01	2.74E+01	5
328	5.636	14.371	10	7.84E-03	1.24E-01	1.10E-02	7.84E-03	1.24E-01	8.79E-01	8.90E-01	2
334	5.691	13.943	10	1.53E-01	2.08E+00	2.14E-01	1.53E-01	2.08E+00	1.48E+01	1.50E+01	4
335	5.690	14.073	10	1.74E-01	2.42E+00	2.44E-01	1.74E-01	2.42E+00	1.72E+01	1.74E+01	5
336	5.654	14.156	10	3.41E-02	5.65E-01	4.77E-02	3.41E-02	5.65E-01	4.00E+00	4.05E+00	3
337	5.627	13.811	10	2.87E-03	1.52E-01	4.02E-03	2.87E-03	1.52E-01	1.07E+00	1.07E+00	2
338	5.888	12.262	10	9.62E-07	6.04E-02	1.35E-06	9.62E-07	6.04E-02	4.23E-01	4.23E-01	2
339	5.993	12.248	10	1.78E-02	2.30E-01	2.49E-02	1.78E-02	2.30E-01	1.63E+00	1.66E+00	2

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

340	5.752	12.293	10	1.78E-02	2.50E-01	2.49E-02	1.78E-02	2.50E-01	1.77E+00	1.80E+00	2
341	5.706	12.340	10	1.78E-02	2.28E-01	2.49E-02	1.78E-02	2.28E-01	1.62E+00	1.65E+00	2
348	6.048	14.515	10	4.09E-01	6.31E+00	5.73E-01	4.09E-01	6.31E+00	4.47E+01	4.53E+01	6
349	6.052	12.911	10	5.39E-02	5.62E-01	7.55E-02	5.39E-02	5.62E-01	4.01E+00	4.08E+00	3
350	6.039	13.007	10	7.22E-02	7.45E-01	1.01E-01	7.22E-02	7.45E-01	5.32E+00	5.42E+00	3
351	5.955	12.889	10	5.36E-02	5.75E-01	7.50E-02	5.36E-02	5.75E-01	4.10E+00	4.18E+00	3
352	5.960	12.980	10	6.85E-02	7.08E-01	9.59E-02	6.85E-02	7.08E-01	5.05E+00	5.15E+00	3
353	5.884	13.058	10	2.42E-02	2.82E-01	3.39E-02	2.42E-02	2.82E-01	2.01E+00	2.04E+00	2
354	5.911	13.172	10	4.25E-02	4.69E-01	5.95E-02	4.25E-02	4.69E-01	3.34E+00	3.40E+00	3
355	5.823	13.093	10	4.54E-02	5.20E-01	6.36E-02	4.54E-02	5.20E-01	3.70E+00	3.77E+00	3
356	5.820	13.172	10	5.46E-02	5.75E-01	7.64E-02	5.46E-02	5.75E-01	4.10E+00	4.18E+00	3
357	6.039	13.482	10	1.11E-01	1.34E+00	1.55E-01	1.11E-01	1.34E+00	9.54E+00	9.69E+00	4
358	6.038	13.406	10	9.86E-02	1.21E+00	1.38E-01	9.86E-02	1.21E+00	8.61E+00	8.75E+00	4
359	6.041	13.323	10	9.30E-02	1.08E+00	1.30E-01	9.30E-02	1.08E+00	7.69E+00	7.82E+00	4
360	6.145	13.753	10	2.10E-06	2.36E-02	2.94E-06	2.10E-06	2.36E-02	1.65E-01	1.65E-01	1
362	6.119	13.900	10	8.58E-03	1.56E-01	1.20E-02	8.58E-03	1.56E-01	1.10E+00	1.12E+00	2
416	5.798	12.686	7	2.69E-02	3.81E-01	3.77E-02	2.69E-02	3.81E-01	2.70E+00	2.74E+00	2
417	5.881	12.714	7	1.01E-02	1.83E-01	1.41E-02	1.01E-02	1.83E-01	1.30E+00	1.31E+00	2
442	5.998	14.225	8	5.95E-01	8.41E+00	8.33E-01	5.95E-01	8.41E+00	5.97E+01	6.05E+01	7
443	5.724	13.641	8	1.63E-01	2.11E+00	2.28E-01	1.63E-01	2.11E+00	1.50E+01	1.52E+01	5
444	5.772	13.525	8	1.40E-01	1.75E+00	1.96E-01	1.40E-01	1.75E+00	1.24E+01	1.26E+01	4
445	5.724	13.585	8	1.48E-01	1.89E+00	2.07E-01	1.48E-01	1.89E+00	1.34E+01	1.36E+01	4
446	5.932	13.871	8	1.14E-01	1.46E+00	1.60E-01	1.14E-01	1.46E+00	1.04E+01	1.05E+01	4
447	5.920	13.941	8	8.37E-02	1.09E+00	1.17E-01	8.37E-02	1.09E+00	7.75E+00	7.86E+00	4
448	5.927	13.817	8	9.53E-02	1.17E+00	1.33E-01	9.53E-02	1.17E+00	8.32E+00	8.46E+00	4

Case 2: Protected 2 rounds at aimpoint (5.85, 16.40)

1	6.093	14.476	10	0.00E+00	1.75E-01	0.00E+00	0.00E+00	5.05E-01	3.54E+00	3.54E+00	3
2	6.092	14.323	10	0.00E+00	2.17E-01	0.00E+00	0.00E+00	6.32E-01	4.42E+00	4.42E+00	3
3	6.056	14.272	10	0.00E+00	1.13E+00	0.00E+00	0.00E+00	3.30E+00	2.31E+01	2.31E+01	5
4	5.928	14.340	10	0.00E+00	5.91E-01	0.00E+00	0.00E+00	1.73E+00	1.21E+01	1.21E+01	4
5	5.996	14.233	10	8.93E-03	2.78E+00	1.25E-02	2.55E-02	8.08E+00	5.66E+01	5.66E+01	7
6	5.940	14.453	10	0.00E+00	1.22E+00	0.00E+00	1.80E-07	3.53E+00	2.47E+01	2.47E+01	5
10	5.849	14.797	10	0.00E+00	1.28E-02	0.00E+00	0.00E+00	3.66E-02	2.56E-01	2.56E-01	2
11	5.840	14.745	10	0.00E+00	1.44E-01	0.00E+00	0.00E+00	4.12E-01	2.88E+00	2.88E+00	2
35	5.984	15.987	10	1.47E-02	5.36E+02	2.06E-02	2.64E-01	1.53E+03	1.07E+04	1.07E+04	8
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-01	1.56E+00	1.56E+00	2
76	5.720	11.676	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-02	5.45E-01	5.45E-01	2
96	5.747	15.847	10	2.59E-02	7.57E+02	3.63E-02	4.96E-01	2.16E+03	1.51E+04	1.51E+04	8
100	5.667	14.564	10	0.00E+00	3.25E-01	0.00E+00	0.00E+00	9.38E-01	6.57E+00	6.57E+00	4
106	5.642	13.947	10	0.00E+00	1.01E-01	0.00E+00	0.00E+00	3.09E-01	2.16E+00	2.16E+00	2
107	5.653	13.814	10	0.00E+00	1.62E-01	0.00E+00	0.00E+00	5.32E-01	3.72E+00	3.72E+00	3
108	5.627	14.130	10	0.00E+00	1.05E-02	0.00E+00	0.00E+00	3.10E-02	2.17E-01	2.17E-01	1
109	5.702	14.036	10	0.00E+00	9.94E-01	0.00E+00	0.00E+00	2.94E+00	2.06E+01	2.06E+01	5
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-01	1.50E+00	1.50E+00	2
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-01	1.51E+00	1.51E+00	2
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-07	2.86E-06	2.86E-06	1
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01	1.24E+00	1.24E+00	2
120	6.033	14.438	10	1.51E-02	3.10E+00	2.11E-02	4.35E-02	8.93E+00	6.26E+01	6.26E+01	7
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-01	4.98E+00	4.98E+00	3
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-01	3.20E+00	3.20E+00	3
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.86E-01	4.10E+00	4.10E+00	3
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-01	2.91E+00	2.91E+00	2
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-01	1.97E+00	1.97E+00	2
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-01	5.29E+00	5.29E+00	3
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-01	4.94E+00	4.94E+00	3
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-01	4.05E+00	4.05E+00	3
129	6.018	13.474	10	0.00E+00	2.21E-01	0.00E+00	0.00E+00	1.48E+00	1.04E+01	1.04E+01	4
130	6.010	13.396	10	0.00E+00	1.00E-01	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
131	6.016	13.310	10	0.00E+00	5.48E-02	0.00E+00	0.00E+00	1.18E+00	8.26E+00	8.26E+00	4
132	6.074	13.908	10	0.00E+00	3.91E-01	0.00E+00	0.00E+00	1.19E+00	8.33E+00	8.33E+00	4
133	6.062	13.731	10	0.00E+00	3.90E-01	0.00E+00	0.00E+00	1.32E+00	9.24E+00	9.24E+00	4
134	6.072	13.821	10	0.00E+00	3.72E-01	0.00E+00	0.00E+00	1.15E+00	8.05E+00	8.05E+00	4
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-01	2.02E+00	2.02E+00	2
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-01	1.26E+00	1.26E+00	2
210	5.928	14.339	8	0.00E+00	5.91E-01	0.00E+00	0.00E+00	1.72E+00	1.20E+01	1.20E+01	4
211	5.764	13.557	8	0.00E+00	3.61E-01	0.00E+00	0.00E+00	1.79E+00	1.25E+01	1.25E+01	4
212	5.766	13.622	8	0.00E+00	4.80E-01	0.00E+00	0.00E+00	2.01E+00	1.41E+01	1.41E+01	4
213	5.767	13.674	8	0.00E+00	5.99E-01	0.00E+00	0.00E+00	2.24E+00	1.57E+01	1.57E+01	5
214	5.958	13.839	8	0.00E+00	7.55E-01	0.00E+00	0.00E+00	2.32E+00	1.62E+01	1.62E+01	5
215	5.913	13.903	8	0.00E+00	2.65E-01	0.00E+00	0.00E+00	8.06E-01	5.64E+00	5.64E+00	3
216	5.912	13.851	8	0.00E+00	2.44E-01	0.00E+00	0.00E+00	7.51E-01	5.26E+00	5.26E+00	3
231	5.991	14.398	10	4.59E-02	3.97E+00	6.43E-02	1.31E-01	1.14E+01	8.00E+01	8.00E+01	8
232	6.000	14.484	10	6.61E-02	5.66E+00	9.25E-02	1.90E-01	1.63E+01	1.14E+02	1.14E+02	8
233	6.059	14.191	10	0.00E+00	9.25E-01	0.00E+00	0.00E+00	2.71E+00	1.90E+01	1.90E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

234	6.048	14.352	10	1.30E-03	1.63E+00	1.82E-03	3.73E-03	4.72E+00	3.30E+01	3.30E+01	6
235	5.928	14.253	10	0.00E+00	5.70E-01	0.00E+00	0.00E+00	1.67E+00	1.17E+01	1.17E+01	4
236	5.995	14.318	10	3.10E-02	3.46E+00	4.34E-02	8.87E-02	1.00E+01	7.01E+01	7.02E+01	7
240	5.917	14.848	10	0.00E+00	1.79E-01	0.00E+00	0.00E+00	5.12E-01	3.58E+00	3.58E+00	3
241	5.911	14.774	10	0.00E+00	1.44E-01	0.00E+00	0.00E+00	4.13E-01	2.89E+00	2.89E+00	2
242	5.917	14.700	10	0.00E+00	2.58E-01	0.00E+00	0.00E+00	7.40E-01	5.18E+00	5.18E+00	3
264	6.044	15.980	10	2.28E-06	5.66E+00	3.19E-06	1.01E-03	1.62E+01	1.13E+02	1.13E+02	8
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.04E-02	4.23E-01	4.23E-01	2
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-02	2.59E-01	2.59E-01	2
304	5.755	11.682	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-01	7.35E-01	7.35E-01	2
325	5.702	14.442	10	1.94E-03	1.88E+00	2.72E-03	5.60E-03	5.44E+00	3.81E+01	3.81E+01	6
326	5.689	14.515	10	0.00E+00	1.26E+00	0.00E+00	3.59E-07	3.64E+00	2.55E+01	2.55E+01	5
328	5.636	14.371	10	0.00E+00	4.10E-02	0.00E+00	0.00E+00	1.18E-01	8.26E-01	8.26E-01	2
334	5.691	13.943	10	0.00E+00	6.54E-01	0.00E+00	0.00E+00	1.98E+00	1.39E+01	1.39E+01	4
335	5.690	14.073	10	0.00E+00	7.78E-01	0.00E+00	0.00E+00	2.30E+00	1.61E+01	1.61E+01	5
336	5.654	14.156	10	0.00E+00	1.82E-01	0.00E+00	0.00E+00	5.38E-01	3.77E+00	3.77E+00	3
337	5.627	13.811	10	0.00E+00	4.59E-02	0.00E+00	0.00E+00	1.44E-01	1.01E+00	1.01E+00	2
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-02	3.93E-01	3.93E-01	2
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-01	1.50E+00	1.50E+00	2
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-01	1.63E+00	1.63E+00	2
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-01	1.48E+00	1.48E+00	2
348	6.048	14.515	10	1.89E-03	2.09E+00	2.65E-03	5.56E-03	6.02E+00	4.21E+01	4.22E+01	6
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-01	3.66E+00	3.66E+00	3
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-01	4.85E+00	4.85E+00	3
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-01	3.75E+00	3.75E+00	3
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-01	4.61E+00	4.61E+00	3
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-01	1.84E+00	1.84E+00	2
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-01	3.05E+00	3.05E+00	3
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-01	3.39E+00	3.39E+00	3
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-01	3.75E+00	3.75E+00	3
357	6.039	13.482	10	0.00E+00	1.92E-01	0.00E+00	0.00E+00	1.26E+00	8.82E+00	8.82E+00	4
358	6.038	13.406	10	0.00E+00	9.10E-02	0.00E+00	0.00E+00	1.13E+00	7.91E+00	7.91E+00	4
359	6.041	13.323	10	0.00E+00	4.91E-02	0.00E+00	0.00E+00	1.01E+00	7.07E+00	7.07E+00	4
360	6.145	13.753	10	0.00E+00	5.97E-03	0.00E+00	0.00E+00	2.24E-02	1.57E-01	1.57E-01	1
362	6.119	13.900	10	0.00E+00	4.97E-02	0.00E+00	0.00E+00	1.49E-01	1.04E+00	1.04E+00	2
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-01	2.48E+00	2.48E+00	2
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-01	1.19E+00	1.19E+00	2
442	5.998	14.225	8	7.15E-03	2.75E+00	1.00E-02	2.05E-02	8.01E+00	5.61E+01	5.61E+01	7
443	5.724	13.641	8	0.00E+00	4.98E-01	0.00E+00	0.00E+00	1.99E+00	1.39E+01	1.39E+01	4
444	5.772	13.525	8	0.00E+00	2.98E-01	0.00E+00	0.00E+00	1.65E+00	1.16E+01	1.16E+01	4
445	5.724	13.585	8	0.00E+00	3.85E-01	0.00E+00	0.00E+00	1.78E+00	1.25E+01	1.25E+01	4
446	5.932	13.871	8	0.00E+00	4.55E-01	0.00E+00	0.00E+00	1.39E+00	9.73E+00	9.73E+00	4
447	5.920	13.941	8	0.00E+00	3.42E-01	0.00E+00	0.00E+00	1.03E+00	7.21E+00	7.21E+00	4
448	5.927	13.817	8	0.00E+00	3.58E-01	0.00E+00	0.00E+00	1.11E+00	7.77E+00	7.77E+00	4

VX 250kg Bomb
Moderate Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				12 rounds at aimpoint (5.65, 17.35)							
1	6.093	14.476	10	7.06E-02	6.08E-01	9.88E-02	7.06E-02	6.08E-01	4.35E+00	4.45E+00	3
2	6.092	14.323	10	6.59E-02	5.52E-01	9.23E-02	6.59E-02	5.52E-01	3.96E+00	4.05E+00	3
3	6.056	14.272	10	2.68E-01	1.32E+00	3.75E-01	2.68E-01	1.32E+00	9.62E+00	9.99E+00	4
4	5.928	14.340	10	1.03E+00	4.22E+00	1.44E+00	1.03E+00	4.22E+00	3.10E+01	3.24E+01	6
5	5.996	14.233	10	7.50E-01	2.86E+00	1.05E+00	7.50E-01	2.86E+00	2.11E+01	2.21E+01	5
6	5.940	14.453	10	1.08E+00	5.01E+00	1.51E+00	1.08E+00	5.01E+00	3.66E+01	3.81E+01	6
10	5.849	14.797	10	1.44E+00	9.72E+00	2.02E+00	1.44E+00	9.72E+00	7.01E+01	7.21E+01	7
11	5.840	14.745	10	1.39E+00	8.86E+00	1.95E+00	1.39E+00	8.86E+00	6.40E+01	6.59E+01	7
12	5.853	14.870	10	1.52E+00	1.10E+01	2.13E+00	1.52E+00	1.10E+01	7.91E+01	8.13E+01	8
35	5.984	15.987	10	6.50E+00	1.26E+02	9.10E+00	6.50E+00	1.26E+02	8.91E+02	9.00E+02	8
36	6.098	15.997	10	1.14E-02	2.14E-01	1.60E-02	1.14E-02	2.14E-01	1.51E+00	1.53E+00	2
40	5.550	13.245	10	4.20E-01	9.51E-01	5.88E-01	4.20E-01	9.51E-01	7.25E+00	7.83E+00	4
41	5.474	13.201	10	3.40E-01	6.83E-01	4.76E-01	3.40E-01	6.83E-01	5.26E+00	5.73E+00	3
42	5.507	13.288	10	4.28E-01	8.95E-01	5.99E-01	4.28E-01	8.95E-01	6.86E+00	7.46E+00	4
67	5.560	12.798	10	2.26E-01	5.44E-01	3.16E-01	2.26E-01	5.44E-01	4.12E+00	4.44E+00	3
68	5.483	12.959	10	2.60E-01	5.46E-01	3.64E-01	2.60E-01	5.46E-01	4.19E+00	4.55E+00	3
69	5.563	12.908	10	2.72E-01	6.29E-01	3.81E-01	2.72E-01	6.29E-01	4.78E+00	5.16E+00	3
70	5.463	12.826	10	1.79E-01	3.97E-01	2.51E-01	1.79E-01	3.97E-01	3.03E+00	3.28E+00	3
71	5.648	12.900	10	2.76E-01	6.27E-01	3.86E-01	2.76E-01	6.27E-01	4.78E+00	5.16E+00	3

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

72	5.451	12.890	10	1.94E-01	4.01E-01	2.72E-01	1.94E-01	4.01E-01	3.08E+00	3.35E+00	3
73	5.605	10.601	10	2.24E-02	1.49E-01	3.14E-02	2.24E-02	1.49E-01	1.07E+00	1.11E+00	2
76	5.720	11.676	10	2.91E-02	1.91E-01	4.07E-02	2.91E-02	1.91E-01	1.38E+00	1.42E+00	2
77	5.601	11.699	10	3.57E-02	1.98E-01	5.00E-02	3.57E-02	1.98E-01	1.44E+00	1.49E+00	2
94	5.423	15.512	10	1.25E+00	1.58E+01	1.75E+00	1.25E+00	1.58E+01	1.12E+02	1.14E+02	8
95	5.601	15.674	10	3.88E+00	5.94E+01	5.43E+00	3.88E+00	5.94E+01	4.21E+02	4.27E+02	8
96	5.747	15.847	10	4.36E+00	7.31E+01	6.10E+00	4.36E+00	7.31E+01	5.18E+02	5.24E+02	8
97	5.610	14.388	10	1.09E+00	4.83E+00	1.53E+00	1.09E+00	4.83E+00	3.53E+01	3.69E+01	6
98	5.554	14.447	10	1.11E+00	5.30E+00	1.55E+00	1.11E+00	5.30E+00	3.87E+01	4.02E+01	6
99	5.616	14.500	10	1.17E+00	5.70E+00	1.64E+00	1.17E+00	5.70E+00	4.15E+01	4.32E+01	6
100	5.667	14.564	10	1.20E+00	6.30E+00	1.68E+00	1.20E+00	6.30E+00	4.58E+01	4.75E+01	6
101	5.392	13.905	10	2.07E-01	8.22E-01	2.90E-01	2.07E-01	8.22E-01	6.04E+00	6.33E+00	4
102	5.474	13.777	10	6.29E-01	1.73E+00	8.81E-01	6.29E-01	1.73E+00	1.30E+01	1.39E+01	4
103	5.406	13.666	10	2.30E-01	6.93E-01	3.22E-01	2.30E-01	6.93E-01	5.17E+00	5.50E+00	3
104	5.461	13.842	10	6.06E-01	1.78E+00	8.48E-01	6.06E-01	1.78E+00	1.33E+01	1.42E+01	4
105	5.476	13.706	10	6.00E-01	1.55E+00	8.40E-01	6.00E-01	1.55E+00	1.17E+01	1.25E+01	4
106	5.642	13.947	10	8.77E-01	3.04E+00	1.23E+00	8.77E-01	3.04E+00	2.25E+01	2.37E+01	5
107	5.653	13.814	10	7.97E-01	2.48E+00	1.12E+00	7.97E-01	2.48E+00	1.85E+01	1.96E+01	5
108	5.627	14.130	10	9.49E-01	3.78E+00	1.33E+00	9.49E-01	3.78E+00	2.78E+01	2.91E+01	5
109	5.702	14.036	10	9.32E-01	3.43E+00	1.30E+00	9.32E-01	3.43E+00	2.53E+01	2.66E+01	5
110	5.702	12.379	10	8.60E-02	4.47E-01	1.20E-01	8.60E-02	4.47E-01	3.25E+00	3.37E+00	3
111	5.784	12.296	10	7.17E-02	4.27E-01	1.00E-01	7.17E-02	4.27E-01	3.09E+00	3.19E+00	3
112	5.875	12.255	10	6.56E-02	4.06E-01	9.18E-02	6.56E-02	4.06E-01	2.93E+00	3.03E+00	3
113	5.966	12.148	10	4.76E-02	2.87E-01	6.66E-02	4.76E-02	2.87E-01	2.08E+00	2.14E+00	2
120	6.033	14.438	10	4.88E-01	2.39E+00	6.83E-01	4.88E-01	2.39E+00	1.74E+01	1.81E+01	5
121	6.032	12.989	10	1.32E-01	3.36E-01	1.85E-01	1.32E-01	3.36E-01	2.54E+00	2.72E+00	2
122	5.929	12.964	10	2.96E-01	6.39E-01	4.14E-01	2.96E-01	6.39E-01	4.89E+00	5.30E+00	3
123	6.033	12.883	10	1.05E-01	2.89E-01	1.47E-01	1.05E-01	2.89E-01	2.17E+00	2.32E+00	2
124	5.934	12.874	10	2.40E-01	5.50E-01	3.36E-01	2.40E-01	5.50E-01	4.19E+00	4.52E+00	3
125	5.888	13.090	10	3.36E-01	8.04E-01	4.70E-01	3.36E-01	8.04E-01	6.10E+00	6.57E+00	4
126	5.793	13.170	10	3.74E-01	8.88E-01	5.24E-01	3.74E-01	8.88E-01	6.74E+00	7.26E+00	4
127	5.789	13.080	10	3.41E-01	8.02E-01	4.77E-01	3.41E-01	8.02E-01	6.09E+00	6.57E+00	4
128	5.929	13.162	10	3.73E-01	8.14E-01	5.22E-01	3.73E-01	8.14E-01	6.22E+00	6.74E+00	4
129	6.018	13.474	10	3.17E-01	7.39E-01	4.44E-01	3.17E-01	7.39E-01	5.62E+00	6.06E+00	4
130	6.010	13.396	10	3.24E-01	7.02E-01	4.54E-01	3.24E-01	7.02E-01	5.37E+00	5.82E+00	3
131	6.016	13.310	10	2.69E-01	5.82E-01	3.77E-01	2.69E-01	5.82E-01	4.45E+00	4.83E+00	3
132	6.074	13.908	10	1.48E-01	7.07E-01	2.07E-01	1.48E-01	7.07E-01	5.16E+00	5.36E+00	3
133	6.062	13.731	10	1.89E-01	6.58E-01	2.65E-01	1.89E-01	6.58E-01	4.87E+00	5.14E+00	3
134	6.072	13.821	10	1.51E-01	6.46E-01	2.11E-01	1.51E-01	6.46E-01	4.73E+00	4.94E+00	3
190	5.817	12.688	7	1.50E-01	4.91E-01	2.10E-01	1.50E-01	4.91E-01	3.65E+00	3.86E+00	3
191	5.850	12.720	7	1.68E-01	5.27E-01	2.35E-01	1.68E-01	5.27E-01	3.92E+00	4.16E+00	3
194	5.504	12.164	7	5.42E-02	3.18E-01	7.59E-02	5.42E-02	3.18E-01	2.30E+00	2.38E+00	2
195	5.583	12.163	7	5.48E-02	3.79E-01	7.67E-02	5.48E-02	3.79E-01	2.73E+00	2.81E+00	2
210	5.928	14.339	8	1.03E+00	4.22E+00	1.44E+00	1.03E+00	4.22E+00	3.10E+01	3.24E+01	6
211	5.764	13.557	8	6.07E-01	1.52E+00	8.50E-01	6.07E-01	1.52E+00	1.15E+01	1.23E+01	4
212	5.766	13.622	8	6.59E-01	1.75E+00	9.23E-01	6.59E-01	1.75E+00	1.32E+01	1.41E+01	4
213	5.767	13.674	8	7.00E-01	1.93E+00	9.80E-01	7.00E-01	1.93E+00	1.45E+01	1.55E+01	5
214	5.958	13.839	8	7.63E-01	2.25E+00	1.07E+00	7.63E-01	2.25E+00	1.68E+01	1.79E+01	5
215	5.913	13.903	8	8.58E-01	2.80E+00	1.20E+00	8.58E-01	2.80E+00	2.08E+01	2.20E+01	5
216	5.912	13.851	8	8.21E-01	2.58E+00	1.15E+00	8.21E-01	2.58E+00	1.92E+01	2.04E+01	5
231	5.991	14.398	10	8.39E-01	3.57E+00	1.17E+00	8.39E-01	3.57E+00	2.62E+01	2.73E+01	5
232	6.000	14.484	10	8.31E-01	3.94E+00	1.16E+00	8.31E-01	3.94E+00	2.87E+01	2.99E+01	5
233	6.059	14.191	10	2.47E-01	1.20E+00	3.46E-01	2.47E-01	1.20E+00	8.75E+00	9.09E+00	4
234	6.048	14.352	10	3.27E-01	1.59E+00	4.58E-01	3.27E-01	1.59E+00	1.16E+01	1.20E+01	4
235	5.928	14.253	10	1.00E+00	3.95E+00	1.40E+00	1.00E+00	3.95E+00	2.91E+01	3.05E+01	6
236	5.995	14.318	10	7.87E-01	3.08E+00	1.10E+00	7.87E-01	3.08E+00	2.27E+01	2.38E+01	5
240	5.917	14.848	10	1.52E+00	1.06E+01	2.13E+00	1.52E+00	1.06E+01	7.63E+01	7.85E+01	8
241	5.911	14.774	10	1.43E+00	9.35E+00	2.00E+00	1.43E+00	9.35E+00	6.75E+01	6.95E+01	7
242	5.917	14.700	10	1.34E+00	8.15E+00	1.88E+00	1.34E+00	8.15E+00	5.89E+01	6.08E+01	7
264	6.044	15.980	10	1.08E+00	2.08E+01	1.51E+00	1.08E+00	2.08E+01	1.47E+02	1.49E+02	8
269	5.451	13.254	10	3.08E-01	6.17E-01	4.31E-01	3.08E-01	6.17E-01	4.75E+00	5.18E+00	3
270	5.514	13.209	10	4.00E-01	8.35E-01	5.60E-01	4.00E-01	8.35E-01	6.41E+00	6.97E+00	4
271	5.566	13.193	10	3.86E-01	9.02E-01	5.40E-01	3.86E-01	9.02E-01	6.85E+00	7.39E+00	4
295	5.413	12.882	10	9.51E-02	2.73E-01	1.33E-01	9.51E-02	2.73E-01	2.04E+00	2.18E+00	2
296	5.537	12.816	10	2.26E-01	5.36E-01	3.16E-01	2.26E-01	5.36E-01	4.07E+00	4.38E+00	3
297	5.496	12.799	10	1.83E-01	4.37E-01	2.56E-01	1.83E-01	4.37E-01	3.32E+00	3.57E+00	3
298	5.561	12.909	10	2.72E-01	6.29E-01	3.81E-01	2.72E-01	6.29E-01	4.78E+00	5.16E+00	3
299	5.615	12.839	10	2.38E-01	5.74E-01	3.33E-01	2.38E-01	5.74E-01	4.35E+00	4.68E+00	3
300	5.608	12.984	10	3.08E-01	7.15E-01	4.31E-01	3.08E-01	7.15E-01	5.44E+00	5.87E+00	3
304	5.755	11.682	10	2.85E-02	1.90E-01	3.99E-02	2.85E-02	1.90E-01	1.37E+00	1.41E+00	2
305	5.635	11.734	10	3.57E-02	1.98E-01	5.00E-02	3.57E-02	1.98E-01	1.44E+00	1.49E+00	2
306	5.353	11.802	10	4.51E-07	0.00E+00	6.31E-07	4.51E-07	0.00E+00	6.31E-07	1.26E-06	1
322	5.324	15.511	10	1.73E-03	7.12E-02	2.42E-03	1.73E-03	7.12E-02	5.01E-01	5.03E-01	2
323	5.639	15.789	10	4.06E+00	6.56E+01	5.68E+00	4.06E+00	6.56E+01	4.65E+02	4.71E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

324	5.484	15.661	10	3.47E+00	5.18E+01	4.86E+00	3.47E+00	5.18E+01	3.67E+02	3.72E+02	8
325	5.702	14.442	10	1.13E+00	5.26E+00	1.58E+00	1.13E+00	5.26E+00	3.84E+01	4.00E+01	6
326	5.689	14.515	10	1.18E+00	5.84E+00	1.65E+00	1.18E+00	5.84E+00	4.25E+01	4.42E+01	6
327	5.512	14.539	10	1.16E+00	5.75E+00	1.62E+00	1.16E+00	5.75E+00	4.19E+01	4.35E+01	6
328	5.636	14.371	10	1.07E+00	4.69E+00	1.50E+00	1.07E+00	4.69E+00	3.43E+01	3.58E+01	6
329	5.419	13.723	10	3.24E-01	9.37E-01	4.54E-01	3.24E-01	9.37E-01	7.01E+00	7.47E+00	4
330	5.408	13.795	10	2.72E-01	8.99E-01	3.81E-01	2.72E-01	8.99E-01	6.67E+00	7.05E+00	4
331	5.493	13.630	10	6.15E-01	1.48E+00	8.61E-01	6.15E-01	1.48E+00	1.12E+01	1.21E+01	4
332	5.361	13.699	10	5.82E-02	3.13E-01	8.15E-02	5.82E-02	3.13E-01	2.27E+00	2.35E+00	2
333	5.363	13.843	10	7.30E-02	4.16E-01	1.02E-01	7.30E-02	4.16E-01	3.01E+00	3.12E+00	3
334	5.691	13.943	10	8.85E-01	3.06E+00	1.24E+00	8.85E-01	3.06E+00	2.27E+01	2.39E+01	5
335	5.690	14.073	10	9.44E-01	3.57E+00	1.32E+00	9.44E-01	3.57E+00	2.63E+01	2.76E+01	5
336	5.654	14.156	10	9.46E-01	3.87E+00	1.32E+00	9.46E-01	3.87E+00	2.84E+01	2.97E+01	5
337	5.627	13.811	10	7.96E-01	2.46E+00	1.11E+00	7.96E-01	2.46E+00	1.83E+01	1.94E+01	5
338	5.888	12.262	10	6.79E-02	4.07E-01	9.51E-02	6.79E-02	4.07E-01	2.94E+00	3.04E+00	3
339	5.993	12.248	10	4.25E-02	2.71E-01	5.95E-02	4.25E-02	2.71E-01	1.96E+00	2.02E+00	2
340	5.752	12.293	10	6.66E-02	4.12E-01	9.32E-02	6.66E-02	4.12E-01	2.98E+00	3.07E+00	3
341	5.706	12.340	10	7.91E-02	4.39E-01	1.11E-01	7.91E-02	4.39E-01	3.18E+00	3.29E+00	3
348	6.048	14.515	10	3.52E-01	2.04E+00	4.93E-01	3.52E-01	2.04E+00	1.48E+01	1.53E+01	5
349	6.052	12.911	10	7.27E-02	2.31E-01	1.02E-01	7.27E-02	2.31E-01	1.72E+00	1.82E+00	2
350	6.039	13.007	10	1.19E-01	3.16E-01	1.67E-01	1.19E-01	3.16E-01	2.38E+00	2.55E+00	2
351	5.955	12.889	10	2.46E-01	5.27E-01	3.44E-01	2.46E-01	5.27E-01	4.03E+00	4.38E+00	3
352	5.960	12.980	10	2.87E-01	5.84E-01	4.02E-01	2.87E-01	5.84E-01	4.49E+00	4.89E+00	3
353	5.884	13.058	10	3.28E-01	7.74E-01	4.59E-01	3.28E-01	7.74E-01	5.88E+00	6.34E+00	4
354	5.911	13.172	10	3.68E-01	8.59E-01	5.15E-01	3.68E-01	8.59E-01	6.53E+00	7.04E+00	4
355	5.823	13.093	10	3.48E-01	8.14E-01	4.87E-01	3.48E-01	8.14E-01	6.19E+00	6.67E+00	4
356	5.820	13.172	10	3.78E-01	8.91E-01	5.29E-01	3.78E-01	8.91E-01	6.77E+00	7.30E+00	4
357	6.039	13.482	10	2.22E-01	5.89E-01	3.11E-01	2.22E-01	5.89E-01	4.43E+00	4.74E+00	3
358	6.038	13.406	10	2.06E-01	5.22E-01	2.88E-01	2.06E-01	5.22E-01	3.94E+00	4.23E+00	3
359	6.041	13.323	10	1.73E-01	4.37E-01	2.42E-01	1.73E-01	4.37E-01	3.30E+00	3.54E+00	3
360	6.145	13.753	10	1.82E-03	2.77E-02	2.55E-03	1.82E-03	2.77E-02	1.96E-01	1.99E-01	1
361	6.165	13.823	10	5.69E-06	0.00E+00	7.97E-06	5.69E-06	0.00E+00	7.97E-06	1.59E-05	1
362	6.119	13.900	10	1.94E-02	2.09E-01	2.72E-02	1.94E-02	2.09E-01	1.49E+00	1.52E+00	2
416	5.798	12.686	7	1.48E-01	4.76E-01	2.07E-01	1.48E-01	4.76E-01	3.54E+00	3.75E+00	3
417	5.881	12.714	7	1.49E-01	4.82E-01	2.09E-01	1.49E-01	4.82E-01	3.58E+00	3.79E+00	3
420	5.601	12.207	7	6.14E-02	4.03E-01	8.60E-02	6.14E-02	4.03E-01	2.91E+00	2.99E+00	2
421	5.517	12.227	7	5.61E-02	3.47E-01	7.85E-02	5.61E-02	3.47E-01	2.51E+00	2.59E+00	2
442	5.998	14.225	8	7.38E-01	2.80E+00	1.03E+00	7.38E-01	2.80E+00	2.06E+01	2.17E+01	5
443	5.724	13.641	8	6.74E-01	1.80E+00	9.44E-01	6.74E-01	1.80E+00	1.35E+01	1.45E+01	4
444	5.772	13.525	8	5.85E-01	1.44E+00	8.19E-01	5.85E-01	1.44E+00	1.09E+01	1.17E+01	4
445	5.724	13.585	8	6.28E-01	1.60E+00	8.79E-01	6.28E-01	1.60E+00	1.21E+01	1.30E+01	4
446	5.932	13.871	8	8.25E-01	2.57E+00	1.16E+00	8.25E-01	2.57E+00	1.91E+01	2.03E+01	5
447	5.920	13.941	8	8.80E-01	2.93E+00	1.23E+00	8.80E-01	2.93E+00	2.17E+01	2.30E+01	5
448	5.927	13.817	8	7.91E-01	2.36E+00	1.11E+00	7.91E-01	2.36E+00	1.76E+01	1.87E+01	5
Case 2: Protected 12 rounds at aimpoint (5.65, 17.35)											
1	6.093	14.476	10	7.61E-03	1.34E-01	1.07E-02	2.25E-02	5.75E-01	4.06E+00	4.07E+00	3
2	6.092	14.323	10	8.19E-03	5.58E-02	1.15E-02	2.65E-02	5.17E-01	3.66E+00	3.67E+00	3
3	6.056	14.272	10	4.26E-02	9.75E-02	5.96E-02	1.45E-01	1.24E+00	8.88E+00	8.94E+00	4
4	5.928	14.340	10	1.90E-01	4.28E-01	2.66E-01	6.36E-01	3.95E+00	2.85E+01	2.88E+01	5
5	5.996	14.233	10	1.26E-01	1.72E-01	1.76E-01	4.70E-01	2.67E+00	1.93E+01	1.95E+01	5
6	5.940	14.453	10	2.08E-01	9.75E-01	2.91E-01	6.39E-01	4.73E+00	3.40E+01	3.43E+01	6
10	5.849	14.797	10	2.31E-01	3.05E+00	3.23E-01	6.61E-01	9.25E+00	6.57E+01	6.60E+01	7
11	5.840	14.745	10	2.31E-01	2.74E+00	3.23E-01	6.62E-01	8.43E+00	5.99E+01	6.03E+01	7
12	5.853	14.870	10	2.33E-01	3.49E+00	3.26E-01	6.67E-01	1.04E+01	7.37E+01	7.41E+01	7
35	5.984	15.987	10	1.06E-01	4.19E+01	1.48E-01	3.25E-01	1.20E+02	8.40E+02	8.41E+02	8
36	6.098	15.997	10	0.00E+00	7.13E-02	0.00E+00	2.90E-07	2.04E-01	1.43E+00	1.43E+00	2
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	3.08E-01	8.84E-01	6.62E+00	6.62E+00	4
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	2.47E-01	6.35E-01	4.79E+00	4.79E+00	3
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	3.10E-01	8.33E-01	6.27E+00	6.27E+00	4
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	1.42E-01	5.06E-01	3.74E+00	3.74E+00	3
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	1.81E-01	5.08E-01	3.81E+00	3.81E+00	3
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	1.83E-01	5.85E-01	4.35E+00	4.35E+00	3
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	1.22E-01	3.69E-01	2.75E+00	2.75E+00	2
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	1.90E-01	5.83E-01	4.35E+00	4.35E+00	3
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	1.36E-01	3.73E-01	2.80E+00	2.80E+00	2
73	5.605	10.601	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	9.73E-01	9.73E-01	2
76	5.720	11.676	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-01	1.25E+00	1.25E+00	2
77	5.601	11.699	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-01	1.29E+00	1.29E+00	2
94	5.423	15.512	10	8.68E-02	5.25E+00	1.22E-01	2.50E-01	1.51E+01	1.06E+02	1.06E+02	8
95	5.601	15.674	10	1.63E-01	1.98E+01	2.28E-01	4.77E-01	5.67E+01	3.98E+02	3.98E+02	8
96	5.747	15.847	10	1.35E-01	2.44E+01	1.89E-01	3.99E-01	6.97E+01	4.88E+02	4.89E+02	8
97	5.610	14.388	10	2.01E-01	6.78E+01	2.81E-01	6.42E-01	4.54E+00	3.27E+01	3.30E+01	6
98	5.554	14.447	10	2.09E-01	9.83E-01	2.93E-01	6.30E-01	5.00E+00	3.59E+01	3.62E+01	6
99	5.616	14.500	10	2.24E-01	1.27E+00	3.14E-01	6.62E-01	5.39E+00	3.87E+01	3.90E+01	6

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

100	5.667	14.564	10	2.27E-01	1.63E+00	3.18E-01	6.55E-01	5.97E+00	4.27E+01	4.30E+01	6
101	5.392	13.905	10	1.02E-02	0.00E+00	1.43E-02	1.18E-01	7.64E-01	5.51E+00	5.53E+00	3
102	5.474	13.777	10	1.78E-02	0.00E+00	2.49E-02	4.34E-01	1.61E+00	1.19E+01	1.19E+01	4
103	5.406	13.666	10	5.78E-04	0.00E+00	8.09E-04	1.48E-01	6.44E-01	4.72E+00	4.72E+00	3
104	5.461	13.842	10	3.35E-02	0.00E+00	4.69E-02	4.08E-01	1.65E+00	1.21E+01	1.22E+01	4
105	5.476	13.706	10	8.03E-03	0.00E+00	1.12E-02	4.21E-01	1.44E+00	1.07E+01	1.07E+01	4
106	5.642	13.947	10	7.81E-02	0.00E+00	1.09E-01	5.45E-01	2.83E+00	2.06E+01	2.07E+01	5
107	5.653	13.814	10	3.24E-02	0.00E+00	4.54E-02	5.18E-01	2.31E+00	1.69E+01	1.69E+01	5
108	5.627	14.130	10	1.35E-01	4.35E-02	1.89E-01	5.78E-01	3.52E+00	2.54E+01	2.56E+01	5
109	5.702	14.036	10	1.04E-01	2.16E-02	1.46E-01	5.80E-01	3.19E+00	2.31E+01	2.33E+01	5
110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	1.35E-02	4.16E-01	2.93E+00	2.93E+00	2
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	4.71E-03	3.97E-01	2.79E+00	2.79E+00	2
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	2.49E-03	3.77E-01	2.64E+00	2.64E+00	2
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-01	1.87E+00	1.87E+00	2
120	6.033	14.438	10	8.90E-02	4.60E-01	1.25E-01	2.72E-01	2.26E+00	1.62E+01	1.63E+01	5
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	9.20E-02	3.13E-01	2.32E+00	2.32E+00	2
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	2.01E-01	5.94E-01	4.44E+00	4.44E+00	3
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	7.20E-02	2.69E-01	1.98E+00	1.98E+00	2
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	1.60E-01	5.11E-01	3.80E+00	3.80E+00	3
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	2.35E-01	7.48E-01	5.57E+00	5.57E+00	3
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	2.69E-01	8.26E-01	6.16E+00	6.16E+00	4
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	2.39E-01	7.46E-01	5.56E+00	5.56E+00	3
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	2.66E-01	7.57E-01	5.67E+00	5.67E+00	3
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	2.27E-01	6.88E-01	5.13E+00	5.13E+00	3
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	2.36E-01	6.52E-01	4.89E+00	4.89E+00	3
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	1.96E-01	5.41E-01	4.06E+00	4.06E+00	3
132	6.074	13.908	10	8.81E-03	0.00E+00	1.23E-02	7.72E-02	6.58E-01	4.71E+00	4.73E+00	3
133	6.062	13.731	10	1.32E-03	0.00E+00	1.85E-03	1.11E-01	6.12E-01	4.44E+00	4.44E+00	3
134	6.072	13.821	10	4.86E-03	0.00E+00	6.80E-03	8.33E-02	6.00E-01	4.32E+00	4.32E+00	3
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	7.32E-02	4.57E-01	3.30E+00	3.30E+00	3
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	8.97E-02	4.90E-01	3.56E+00	3.56E+00	3
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	6.11E-04	2.95E-01	2.07E+00	2.07E+00	2
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	4.07E-04	3.52E-01	2.46E+00	2.46E+00	2
210	5.928	14.339	8	1.90E-01	4.26E-01	2.66E-01	6.36E-01	3.95E+00	2.85E+01	2.88E+01	5
211	5.764	13.557	8	3.20E-04	0.00E+00	4.48E-04	4.22E-01	1.41E+00	1.05E+01	1.05E+01	4
212	5.766	13.622	8	3.26E-03	0.00E+00	4.56E-03	4.51E-01	1.63E+00	1.20E+01	1.20E+01	4
213	5.767	13.674	8	5.58E-03	0.00E+00	7.81E-03	4.74E-01	1.80E+00	1.33E+01	1.33E+01	4
214	5.958	13.839	8	3.33E-02	0.00E+00	4.66E-02	5.07E-01	2.09E+00	1.53E+01	1.54E+01	5
215	5.913	13.903	8	5.19E-02	0.00E+00	7.27E-02	5.49E-01	2.61E+00	1.90E+01	1.91E+01	5
216	5.912	13.851	8	3.67E-02	0.00E+00	5.14E-02	5.33E-01	2.40E+00	1.75E+01	1.76E+01	5
231	5.991	14.398	10	1.61E-01	5.68E-01	2.25E-01	5.10E-01	3.36E+00	2.42E+01	2.45E+01	5
232	6.000	14.484	10	1.63E-01	8.83E-01	2.28E-01	4.88E-01	3.73E+00	2.68E+01	2.70E+01	5
233	6.059	14.191	10	3.60E-02	3.11E-02	5.04E-02	1.35E-01	1.12E+00	8.03E+00	8.08E+00	4
234	6.048	14.352	10	5.64E-02	1.87E-01	7.90E-02	1.78E-01	1.49E+00	1.07E+01	1.08E+01	4
235	5.928	14.253	10	1.68E-01	2.53E-01	2.35E-01	6.19E-01	3.69E+00	2.67E+01	2.69E+01	5
236	5.995	14.318	10	1.44E-01	3.10E-01	2.02E-01	4.90E-01	2.88E+00	2.08E+01	2.10E+01	5
240	5.917	14.848	10	2.40E-01	3.37E+00	3.36E-01	6.86E-01	1.01E+01	7.17E+01	7.20E+01	7
241	5.911	14.774	10	2.37E-01	2.93E+00	3.32E-01	6.78E-01	8.91E+00	6.33E+01	6.37E+01	7
242	5.917	14.700	10	2.33E-01	2.45E+00	3.26E-01	6.67E-01	7.75E+00	5.52E+01	5.55E+01	7
264	6.044	15.980	10	1.24E-02	6.95E+00	1.74E-02	3.81E-02	1.99E+01	1.39E+02	1.39E+02	8
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	2.28E-01	5.74E-01	4.34E+00	4.34E+00	3
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	2.88E-01	7.77E-01	5.84E+00	5.84E+00	3
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	2.81E-01	8.39E-01	6.27E+00	6.27E+00	4
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	5.67E-02	2.54E-01	1.86E+00	1.86E+00	2
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	1.46E-01	4.98E-01	3.69E+00	3.69E+00	3
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	1.18E-01	4.07E-01	3.01E+00	3.01E+00	3
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	1.84E-01	5.85E-01	4.35E+00	4.35E+00	3
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	1.50E-01	5.34E-01	3.95E+00	3.95E+00	3
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	2.07E-01	6.65E-01	4.94E+00	4.94E+00	3
304	5.755	11.682	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01	1.24E+00	1.24E+00	2
305	5.635	11.734	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-01	1.29E+00	1.29E+00	2
322	5.324	15.511	10	0.00E+00	2.37E-02	0.00E+00	0.00E+00	6.79E-02	4.75E-01	4.75E-01	2
323	5.639	15.789	10	1.43E-01	2.19E+01	2.00E-01	4.21E-01	6.26E+01	4.39E+02	4.39E+02	8
324	5.484	15.661	10	1.61E-01	1.73E+01	2.25E-01	4.69E-01	4.94E+01	3.46E+02	3.47E+02	8
325	5.702	14.442	10	2.14E-01	9.69E-01	3.00E-01	6.59E-01	4.96E+00	3.56E+01	3.59E+01	6
326	5.689	14.515	10	2.27E-01	1.36E+00	3.18E-01	6.66E-01	5.53E+00	3.96E+01	4.00E+01	6
327	5.512	14.539	10	2.31E-01	1.38E+00	3.23E-01	6.66E-01	5.44E+00	3.90E+01	3.93E+01	6
328	5.636	14.371	10	2.00E-01	5.82E-01	2.80E-01	6.36E-01	4.40E+00	3.17E+01	3.20E+01	6
329	5.419	13.723	10	2.73E-03	0.00E+00	3.82E-03	2.15E-01	8.71E-01	6.40E+00	6.40E+00	4
330	5.408	13.795	10	6.09E-03	0.00E+00	8.53E-03	1.71E-01	8.36E-01	6.09E+00	6.10E+00	4
331	5.493	13.630	10	4.64E-03	0.00E+00	6.50E-03	4.36E-01	1.38E+00	1.03E+01	1.03E+01	4
332	5.361	13.699	10	0.00E+00	0.00E+00	0.00E+00	2.74E-02	2.91E-01	2.08E+00	2.08E+00	2
333	5.363	13.843	10	1.90E-03	0.00E+00	2.66E-03	3.54E-02	3.87E-01	2.76E+00	2.76E+00	2
334	5.691	13.943	10	7.30E-02	0.00E+00	1.02E-01	5.54E-01	2.85E+00	2.07E+01	2.08E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

335	5.690	14.073	10	1.17E-01	3.05E-02	1.64E-01	5.84E-01	3.32E+00	2.41E+01	2.42E+01	5
336	5.654	14.156	10	1.40E-01	5.93E-02	1.96E-01	5.70E-01	3.60E+00	2.60E+01	2.62E+01	5
337	5.627	13.811	10	3.13E-02	0.00E+00	4.38E-02	5.18E-01	2.29E+00	1.68E+01	1.68E+01	5
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	4.04E-03	3.78E-01	2.65E+00	2.65E+00	2
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	4.00E-03	2.52E-01	1.77E+00	1.77E+00	2
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	2.71E-04	3.83E-01	2.68E+00	2.68E+00	2
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	7.93E-03	4.08E-01	2.87E+00	2.87E+00	2
348	6.048	14.515	10	5.94E-02	4.97E-01	8.32E-02	1.73E-01	1.94E+00	1.38E+01	1.39E+01	4
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	5.18E-02	2.15E-01	1.58E+00	1.58E+00	2
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	8.27E-02	2.93E-01	2.17E+00	2.17E+00	2
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	1.70E-01	4.90E-01	3.67E+00	3.67E+00	3
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	2.02E-01	5.43E-01	4.08E+00	4.08E+00	3
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	2.26E-01	7.20E-01	5.36E+00	5.36E+00	3
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	2.64E-01	7.99E-01	5.96E+00	5.96E+00	3
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	2.46E-01	7.57E-01	5.64E+00	5.64E+00	3
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	2.74E-01	8.29E-01	6.19E+00	6.19E+00	4
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	1.54E-01	5.48E-01	4.05E+00	4.05E+00	3
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	1.45E-01	4.85E-01	3.60E+00	3.60E+00	3
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	1.22E-01	4.07E-01	3.02E+00	3.02E+00	3
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-02	1.81E-01	1.81E-01	1
362	6.119	13.900	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-01	1.37E+00	1.37E+00	2
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	7.11E-02	4.43E-01	3.20E+00	3.20E+00	3
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	8.08E-02	4.48E-01	3.25E+00	3.25E+00	3
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	2.65E-03	3.75E-01	2.63E+00	2.63E+00	2
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	2.41E-03	3.23E-01	2.26E+00	2.26E+00	2
442	5.998	14.225	8	1.23E-01	1.57E-01	1.72E-01	4.62E-01	2.62E+00	1.90E+01	1.92E+01	5
443	5.724	13.641	8	4.79E-03	0.00E+00	6.71E-03	4.59E-01	1.68E+00	1.24E+01	1.24E+01	4
444	5.772	13.525	8	0.00E+00	0.00E+00	0.00E+00	4.08E-01	1.34E+00	9.95E+00	9.95E+00	4
445	5.724	13.585	8	1.84E-03	0.00E+00	2.58E-03	4.33E-01	1.49E+00	1.10E+01	1.10E+01	4
446	5.932	13.871	8	4.35E-02	0.00E+00	6.09E-02	5.38E-01	2.39E+00	1.75E+01	1.75E+01	5
447	5.920	13.941	8	6.36E-02	0.00E+00	8.90E-02	5.60E-01	2.73E+00	1.99E+01	2.00E+01	5
448	5.927	13.817	8	2.72E-02	0.00E+00	3.81E-02	5.23E-01	2.20E+00	1.61E+01	1.62E+01	5

VX 250kg Bomb
Heavy Attack
Height of Release: 70m

				Inhalation			Percutaneous			Total	
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category
Case 1: Unprotected				24 rounds at aimpoint (5.65, 18.00)							
1	6.093	14.476	10	2.33E-01	8.85E-01	3.26E-01	2.33E-01	8.85E-01	6.52E+00	6.85E+00	4
2	6.092	14.323	10	2.44E-01	7.50E-01	3.42E-01	2.44E-01	7.50E-01	5.59E+00	5.93E+00	3
3	6.056	14.272	10	6.32E-01	1.46E+00	8.85E-01	6.32E-01	1.46E+00	1.11E+01	1.20E+01	4
4	5.928	14.340	10	2.05E+00	4.56E+00	2.87E+00	2.05E+00	4.56E+00	3.48E+01	3.77E+01	6
5	5.996	14.233	10	1.43E+00	2.72E+00	2.00E+00	1.43E+00	2.72E+00	2.10E+01	2.30E+01	5
6	5.940	14.453	10	2.11E+00	5.30E+00	2.95E+00	2.11E+00	5.30E+00	4.01E+01	4.30E+01	6
10	5.849	14.797	10	2.42E+00	8.31E+00	3.39E+00	2.42E+00	8.31E+00	6.16E+01	6.49E+01	7
11	5.840	14.745	10	2.40E+00	7.96E+00	3.36E+00	2.40E+00	7.96E+00	5.91E+01	6.24E+01	7
12	5.853	14.870	10	2.47E+00	9.12E+00	3.46E+00	2.47E+00	9.12E+00	6.73E+01	7.08E+01	7
35	5.984	15.987	10	4.72E+00	5.73E+01	6.61E+00	4.72E+00	5.73E+01	4.08E+02	4.14E+02	8
36	6.098	15.997	10	3.95E-02	7.62E-01	5.53E-02	3.95E-02	7.62E-01	5.39E+00	5.44E+00	3
40	5.550	13.245	10	1.42E+00	1.12E+00	1.99E+00	1.42E+00	1.12E+00	9.83E+00	1.18E+01	4
41	5.474	13.201	10	1.06E+00	7.73E-01	1.48E+00	1.06E+00	7.73E-01	6.90E+00	8.38E+00	4
42	5.507	13.288	10	1.31E+00	9.78E-01	1.83E+00	1.31E+00	9.78E-01	8.68E+00	1.05E+01	4
67	5.560	12.798	10	1.09E+00	8.98E-01	1.53E+00	1.09E+00	8.98E-01	7.81E+00	9.34E+00	4
68	5.483	12.959	10	9.95E-01	7.64E-01	1.39E+00	9.95E-01	7.64E-01	6.74E+00	8.13E+00	4
69	5.563	12.908	10	1.18E+00	9.51E-01	1.65E+00	1.18E+00	9.51E-01	8.31E+00	9.96E+00	4
70	5.463	12.826	10	7.96E-01	6.30E-01	1.11E+00	7.96E-01	6.30E-01	5.52E+00	6.64E+00	4
71	5.648	12.900	10	1.18E+00	9.80E-01	1.65E+00	1.18E+00	9.80E-01	8.51E+00	1.02E+01	4
72	5.451	12.890	10	7.53E-01	6.01E-01	1.05E+00	7.53E-01	6.01E-01	5.26E+00	6.32E+00	4
73	5.605	10.601	10	1.78E-02	1.29E-01	2.49E-02	1.78E-02	1.29E-01	9.28E-01	9.53E-01	2
76	5.720	11.676	10	2.98E-01	4.49E-01	4.17E-01	2.98E-01	4.49E-01	3.56E+00	3.98E+00	3
77	5.601	11.699	10	3.32E-01	4.66E-01	4.65E-01	3.32E-01	4.66E-01	3.73E+00	4.19E+00	3
78	5.331	11.805	10	3.70E-06	0.00E+00	5.18E-06	3.70E-06	0.00E+00	5.18E-06	1.04E-05	1
94	5.423	15.512	10	1.64E+00	1.20E+01	2.30E+00	1.64E+00	1.20E+01	8.63E+01	8.86E+01	8
95	5.601	15.674	10	4.06E+00	3.59E+01	5.68E+00	4.06E+00	3.59E+01	2.57E+02	2.63E+02	8
96	5.747	15.847	10	4.42E+00	4.65E+01	6.19E+00	4.42E+00	4.65E+01	3.32E+02	3.38E+02	8
97	5.610	14.388	10	2.21E+00	5.22E+00	3.09E+00	2.21E+00	5.22E+00	3.96E+01	4.27E+01	6
98	5.554	14.447	10	2.23E+00	5.69E+00	3.12E+00	2.23E+00	5.69E+00	4.30E+01	4.61E+01	6
99	5.616	14.500	10	2.28E+00	6.15E+00	3.19E+00	2.28E+00	6.15E+00	4.62E+01	4.94E+01	6
100	5.667	14.564	10	2.32E+00	6.68E+00	3.25E+00	2.32E+00	6.68E+00	5.00E+01	5.33E+01	7

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

101	5.392	13.905	10	5.40E-01	7.03E-01	7.56E-01	5.40E-01	7.03E-01	5.68E+00	6.43E+00	4
102	5.474	13.777	10	1.34E+00	1.42E+00	1.88E+00	1.34E+00	1.42E+00	1.18E+01	1.37E+01	4
103	5.406	13.666	10	6.50E-01	6.72E-01	9.10E-01	6.50E-01	6.72E-01	5.61E+00	6.52E+00	4
104	5.461	13.842	10	1.26E+00	1.42E+00	1.76E+00	1.26E+00	1.42E+00	1.17E+01	1.35E+01	4
105	5.476	13.706	10	1.32E+00	1.34E+00	1.85E+00	1.32E+00	1.34E+00	1.12E+01	1.31E+01	4
106	5.642	13.947	10	1.82E+00	2.41E+00	2.55E+00	1.82E+00	2.41E+00	1.94E+01	2.20E+01	5
107	5.653	13.814	10	1.74E+00	1.98E+00	2.44E+00	1.74E+00	1.98E+00	1.63E+01	1.87E+01	5
108	5.627	14.130	10	1.96E+00	3.31E+00	2.74E+00	1.96E+00	3.31E+00	2.59E+01	2.87E+01	5
109	5.702	14.036	10	1.88E+00	2.75E+00	2.63E+00	1.88E+00	2.75E+00	2.19E+01	2.45E+01	5
110	5.702	12.379	10	7.47E-01	5.80E-01	1.05E+00	7.47E-01	5.80E-01	5.11E+00	6.15E+00	4
111	5.784	12.296	10	6.58E-01	5.41E-01	9.21E-01	6.58E-01	5.41E-01	4.71E+00	5.63E+00	3
112	5.875	12.255	10	6.28E-01	4.80E-01	8.79E-01	6.28E-01	4.80E-01	4.24E+00	5.12E+00	3
113	5.966	12.148	10	4.97E-01	3.39E-01	6.96E-01	4.97E-01	3.39E-01	3.07E+00	3.76E+00	3
120	6.033	14.438	10	9.98E-01	2.63E+00	1.40E+00	9.98E-01	2.63E+00	1.98E+01	2.12E+01	5
121	6.032	12.989	10	5.89E-01	4.90E-01	8.25E-01	5.89E-01	4.90E-01	4.25E+00	5.08E+00	3
122	5.929	12.964	10	1.16E+00	9.01E-01	1.62E+00	1.16E+00	9.01E-01	7.93E+00	9.56E+00	4
123	6.033	12.883	10	5.52E-01	4.62E-01	7.73E-01	5.52E-01	4.62E-01	4.01E+00	4.78E+00	3
124	5.934	12.874	10	1.09E+00	8.52E-01	1.53E+00	1.09E+00	8.52E-01	7.49E+00	9.02E+00	4
125	5.888	13.090	10	1.33E+00	1.01E+00	1.86E+00	1.33E+00	1.01E+00	8.93E+00	1.08E+01	4
126	5.793	13.170	10	1.38E+00	1.05E+00	1.93E+00	1.38E+00	1.05E+00	9.28E+00	1.12E+01	4
127	5.789	13.080	10	1.32E+00	1.04E+00	1.85E+00	1.32E+00	1.04E+00	9.13E+00	1.10E+01	4
128	5.929	13.162	10	1.28E+00	9.52E-01	1.79E+00	1.28E+00	9.52E-01	8.46E+00	1.02E+01	4
129	6.018	13.474	10	8.52E-01	7.56E-01	1.19E+00	8.52E-01	7.56E-01	6.48E+00	7.68E+00	4
130	6.010	13.396	10	9.03E-01	7.39E-01	1.26E+00	9.03E-01	7.39E-01	6.44E+00	7.70E+00	4
131	6.016	13.310	10	8.20E-01	6.51E-01	1.15E+00	8.20E-01	6.51E-01	5.71E+00	6.85E+00	4
132	6.074	13.908	10	3.94E-01	5.87E-01	5.52E-01	3.94E-01	5.87E-01	4.66E+00	5.21E+00	3
133	6.062	13.731	10	4.78E-01	5.77E-01	6.69E-01	4.78E-01	5.77E-01	4.71E+00	5.38E+00	3
134	6.072	13.821	10	3.98E-01	5.42E-01	5.57E-01	3.98E-01	5.42E-01	4.35E+00	4.91E+00	3
190	5.817	12.688	7	1.02E+00	8.61E-01	1.43E+00	1.02E+00	8.61E-01	7.46E+00	8.88E+00	4
191	5.850	12.720	7	1.03E+00	8.88E-01	1.44E+00	1.03E+00	8.88E-01	7.66E+00	9.10E+00	4
194	5.504	12.164	7	5.77E-01	4.12E-01	8.08E-01	5.77E-01	4.12E-01	3.69E+00	4.50E+00	3
195	5.583	12.163	7	5.91E-01	4.87E-01	8.27E-01	5.91E-01	4.87E-01	4.24E+00	5.06E+00	3
210	5.928	14.339	8	2.05E+00	4.55E+00	2.87E+00	2.05E+00	4.55E+00	3.47E+01	3.76E+01	6
211	5.764	13.557	8	1.63E+00	1.52E+00	2.28E+00	1.63E+00	1.52E+00	1.29E+01	1.52E+01	5
212	5.766	13.622	8	1.66E+00	1.63E+00	2.32E+00	1.66E+00	1.63E+00	1.37E+01	1.61E+01	5
213	5.767	13.674	8	1.68E+00	1.73E+00	2.35E+00	1.68E+00	1.73E+00	1.45E+01	1.68E+01	5
214	5.958	13.839	8	1.50E+00	1.76E+00	2.10E+00	1.50E+00	1.76E+00	1.44E+01	1.65E+01	5
215	5.913	13.903	8	1.72E+00	2.19E+00	2.41E+00	1.72E+00	2.19E+00	1.77E+01	2.01E+01	5
216	5.912	13.851	8	1.69E+00	2.04E+00	2.37E+00	1.69E+00	2.04E+00	1.66E+01	1.90E+01	5
231	5.991	14.398	10	1.60E+00	3.79E+00	2.24E+00	1.60E+00	3.79E+00	2.88E+01	3.10E+01	6
232	6.000	14.484	10	1.55E+00	4.05E+00	2.17E+00	1.55E+00	4.05E+00	3.05E+01	3.27E+01	6
233	6.059	14.191	10	5.86E-01	1.21E+00	8.20E-01	5.86E-01	1.21E+00	9.29E+00	1.01E+01	4
234	6.048	14.352	10	7.42E-01	1.86E+00	1.04E+00	7.42E-01	1.86E+00	1.41E+01	1.51E+01	5
235	5.928	14.253	10	1.98E+00	3.90E+00	2.77E+00	1.98E+00	3.90E+00	3.01E+01	3.28E+01	6
236	5.995	14.318	10	1.50E+00	3.23E+00	2.10E+00	1.50E+00	3.23E+00	2.47E+01	2.68E+01	5
240	5.917	14.848	10	2.41E+00	8.61E+00	3.37E+00	2.41E+00	8.61E+00	6.36E+01	6.70E+01	7
241	5.911	14.774	10	2.38E+00	7.98E+00	3.33E+00	2.38E+00	7.98E+00	5.92E+01	6.25E+01	7
242	5.917	14.700	10	2.33E+00	7.41E+00	3.26E+00	2.33E+00	7.41E+00	5.51E+01	5.84E+01	7
264	6.044	15.980	10	1.40E+00	1.78E+01	1.96E+00	1.40E+00	1.78E+01	1.27E+02	1.29E+02	8
269	5.451	13.254	10	9.25E-01	7.23E-01	1.30E+00	9.25E-01	7.23E-01	6.36E+00	7.65E+00	4
270	5.514	13.209	10	1.29E+00	9.33E-01	1.81E+00	1.29E+00	9.33E-01	8.34E+00	1.01E+01	4
271	5.566	13.193	10	1.39E+00	1.06E+00	1.95E+00	1.39E+00	1.06E+00	9.37E+00	1.13E+01	4
295	5.413	12.882	10	4.94E-01	4.39E-01	6.92E-01	4.94E-01	4.39E-01	3.76E+00	4.46E+00	3
296	5.537	12.816	10	1.08E+00	8.64E-01	1.51E+00	1.08E+00	8.64E-01	7.56E+00	9.07E+00	4
297	5.496	12.799	10	9.85E-01	7.59E-01	1.38E+00	9.85E-01	7.59E-01	6.69E+00	8.07E+00	4
298	5.561	12.909	10	1.18E+00	9.49E-01	1.65E+00	1.18E+00	9.49E-01	8.30E+00	9.95E+00	4
299	5.615	12.839	10	1.14E+00	9.65E-01	1.60E+00	1.14E+00	9.65E-01	8.35E+00	9.95E+00	4
300	5.608	12.984	10	1.25E+00	1.02E+00	1.75E+00	1.25E+00	1.02E+00	8.89E+00	1.06E+01	4
304	5.755	11.682	10	2.89E-01	4.33E-01	4.05E-01	2.89E-01	4.33E-01	3.44E+00	3.84E+00	3
305	5.635	11.734	10	3.38E-01	4.47E-01	4.73E-01	3.38E-01	4.47E-01	3.60E+00	4.08E+00	3
306	5.353	11.802	10	6.57E-03	1.07E-02	9.20E-03	6.57E-03	1.07E-02	8.41E-02	9.33E-02	1
322	5.324	15.511	10	3.56E-02	4.66E-01	4.98E-02	3.56E-02	4.66E-01	3.31E+00	3.36E+00	3
323	5.639	15.789	10	4.24E+00	4.19E+01	5.94E+00	4.24E+00	4.19E+01	2.99E+02	3.05E+02	8
324	5.484	15.661	10	3.62E+00	3.09E+01	5.07E+00	3.62E+00	3.09E+01	2.21E+02	2.26E+02	8
325	5.702	14.442	10	2.23E+00	5.67E+00	3.12E+00	2.23E+00	5.67E+00	4.28E+01	4.59E+01	6
326	5.689	14.515	10	2.28E+00	6.28E+00	3.19E+00	2.28E+00	6.28E+00	4.72E+01	5.03E+01	7
327	5.512	14.539	10	2.18E+00	5.90E+00	3.05E+00	2.18E+00	5.90E+00	4.44E+01	4.74E+01	6
328	5.636	14.371	10	2.20E+00	5.10E+00	3.08E+00	2.20E+00	5.10E+00	3.88E+01	4.19E+01	6
329	5.419	13.723	10	7.94E-01	8.36E-01	1.11E+00	7.94E-01	8.36E-01	6.96E+00	8.08E+00	4
330	5.408	13.795	10	6.92E-01	7.76E-01	9.69E-01	6.92E-01	7.76E-01	6.40E+00	7.37E+00	4
331	5.493	13.630	10	1.43E+00	1.37E+00	2.00E+00	1.43E+00	1.37E+00	1.16E+01	1.36E+01	4
332	5.361	13.699	10	2.62E-01	3.06E-01	3.67E-01	2.62E-01	3.06E-01	2.51E+00	2.88E+00	2
333	5.363	13.843	10	2.82E-01	3.71E-01	3.95E-01	2.82E-01	3.71E-01	2.99E+00	3.39E+00	3
334	5.691	13.943	10	1.81E+00	2.38E+00	2.53E+00	1.81E+00	2.38E+00	1.92E+01	2.17E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

335	5.690	14.073	10	1.91E+00	2.97E+00	2.67E+00	1.91E+00	2.97E+00	2.35E+01	2.61E+01	5
336	5.654	14.156	10	2.00E+00	3.49E+00	2.80E+00	2.00E+00	3.49E+00	2.72E+01	3.00E+01	6
337	5.627	13.811	10	1.74E+00	1.97E+00	2.44E+00	1.74E+00	1.97E+00	1.62E+01	1.87E+01	5
338	5.888	12.262	10	6.34E-01	4.82E-01	8.88E-01	6.34E-01	4.82E-01	4.26E+00	5.15E+00	3
339	5.993	12.248	10	4.59E-01	3.25E-01	6.43E-01	4.59E-01	3.25E-01	2.92E+00	3.56E+00	3
340	5.752	12.293	10	6.62E-01	5.50E-01	9.27E-01	6.62E-01	5.50E-01	4.78E+00	5.70E+00	3
341	5.706	12.340	10	7.16E-01	5.64E-01	1.00E+00	7.16E-01	5.64E-01	4.95E+00	5.95E+00	3
348	6.048	14.515	10	7.76E-01	2.32E+00	1.09E+00	7.76E-01	2.32E+00	1.73E+01	1.84E+01	5
349	6.052	12.911	10	4.25E-01	3.80E-01	5.95E-01	4.25E-01	3.80E-01	3.26E+00	3.85E+00	3
350	6.039	13.007	10	5.41E-01	4.60E-01	7.57E-01	5.41E-01	4.60E-01	3.98E+00	4.73E+00	3
351	5.955	12.889	10	1.04E+00	7.95E-01	1.46E+00	1.04E+00	7.95E-01	7.02E+00	8.48E+00	4
352	5.960	12.980	10	1.06E+00	8.09E-01	1.48E+00	1.06E+00	8.09E-01	7.15E+00	8.63E+00	4
353	5.884	13.058	10	1.30E+00	1.01E+00	1.82E+00	1.30E+00	1.01E+00	8.89E+00	1.07E+01	4
354	5.911	13.172	10	1.35E+00	9.77E-01	1.89E+00	1.35E+00	9.77E-01	8.73E+00	1.06E+01	4
355	5.823	13.093	10	1.33E+00	1.05E+00	1.86E+00	1.33E+00	1.05E+00	9.21E+00	1.11E+01	4
356	5.820	13.172	10	1.38E+00	1.07E+00	1.93E+00	1.38E+00	1.07E+00	9.42E+00	1.14E+01	4
357	6.039	13.482	10	6.59E-01	6.06E-01	9.23E-01	6.59E-01	6.06E-01	5.16E+00	6.09E+00	4
358	6.038	13.406	10	6.53E-01	5.61E-01	9.14E-01	6.53E-01	5.61E-01	4.84E+00	5.76E+00	3
359	6.041	13.323	10	6.06E-01	5.15E-01	8.48E-01	6.06E-01	5.15E-01	4.45E+00	5.30E+00	3
360	6.145	13.753	10	1.53E-02	2.64E-02	2.14E-02	1.53E-02	2.64E-02	2.06E-01	2.28E-01	1
361	6.165	13.823	10	4.66E-06	0.00E+00	6.52E-06	4.66E-06	0.00E+00	6.52E-06	1.30E-05	1
362	6.119	13.900	10	9.86E-02	1.85E-01	1.38E-01	9.86E-02	1.85E-01	1.43E+00	1.57E+00	2
416	5.798	12.686	7	1.02E+00	8.54E-01	1.43E+00	1.02E+00	8.54E-01	7.41E+00	8.83E+00	4
417	5.881	12.714	7	1.03E+00	8.54E-01	1.44E+00	1.03E+00	8.54E-01	7.42E+00	8.86E+00	4
419	5.264	13.099	7	1.67E-06	0.00E+00	2.34E-06	1.67E-06	0.00E+00	2.34E-06	4.68E-06	1
420	5.601	12.207	7	6.26E-01	5.08E-01	8.76E-01	6.26E-01	5.08E-01	4.43E+00	5.31E+00	3
421	5.517	12.227	7	6.13E-01	4.41E-01	8.58E-01	6.13E-01	4.41E-01	3.95E+00	4.80E+00	3
442	5.998	14.225	8	1.40E+00	2.64E+00	1.96E+00	1.40E+00	2.64E+00	2.04E+01	2.24E+01	5
443	5.724	13.641	8	1.67E+00	1.66E+00	2.34E+00	1.67E+00	1.66E+00	1.40E+01	1.63E+01	5
444	5.772	13.525	8	1.61E+00	1.47E+00	2.25E+00	1.61E+00	1.47E+00	1.25E+01	1.48E+01	4
445	5.724	13.585	8	1.65E+00	1.56E+00	2.31E+00	1.65E+00	1.56E+00	1.32E+01	1.55E+01	5
446	5.932	13.871	8	1.65E+00	2.01E+00	2.31E+00	1.65E+00	2.01E+00	1.64E+01	1.87E+01	5
447	5.920	13.941	8	1.73E+00	2.27E+00	2.42E+00	1.73E+00	2.27E+00	1.83E+01	2.07E+01	5
448	5.927	13.817	8	1.62E+00	1.87E+00	2.27E+00	1.62E+00	1.87E+00	1.54E+01	1.76E+01	5

Case 2: Protected 24 rounds at aimpoint (5.65, 18.00)

1	6.093	14.476	10	1.12E-02	0.00E+00	1.57E-02	1.34E-01	8.23E-01	5.95E+00	5.96E+00	3
2	6.092	14.323	10	5.20E-03	0.00E+00	7.28E-03	1.59E-01	6.98E-01	5.11E+00	5.12E+00	3
3	6.056	14.272	10	1.61E-02	0.00E+00	2.25E-02	4.60E-01	1.36E+00	1.02E+01	1.02E+01	4
4	5.928	14.340	10	7.81E-02	0.00E+00	1.09E-01	1.50E+00	4.24E+00	3.18E+01	3.19E+01	6
5	5.996	14.233	10	2.48E-02	0.00E+00	3.47E-02	1.07E+00	2.53E+00	1.92E+01	1.92E+01	5
6	5.940	14.453	10	1.46E-01	1.20E-02	2.04E-01	1.50E+00	4.93E+00	3.66E+01	3.68E+01	6
10	5.849	14.797	10	4.11E-01	4.90E-01	5.75E-01	1.58E+00	7.76E+00	5.65E+01	5.71E+01	7
11	5.840	14.745	10	3.75E-01	3.75E-01	5.25E-01	1.58E+00	7.43E+00	5.42E+01	5.47E+01	7
12	5.853	14.870	10	4.46E-01	1.02E+00	6.24E-01	1.58E+00	8.56E+00	6.21E+01	6.28E+01	7
35	5.984	15.987	10	3.86E-01	1.90E+01	5.40E-01	1.11E+00	5.46E+01	3.84E+02	3.84E+02	8
36	6.098	15.997	10	2.31E-03	2.53E-01	3.23E-03	6.61E-03	7.26E-01	5.09E+00	5.09E+00	3
40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.04E+00	8.95E+00	8.95E+00	4
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	8.98E-01	7.19E-01	6.29E+00	6.29E+00	4
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	1.11E+00	9.10E-01	7.92E+00	7.92E+00	4
67	5.560	12.798	10	0.00E+00	0.00E+00	0.00E+00	9.02E-01	8.35E-01	7.11E+00	7.11E+00	4
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	8.35E-01	7.11E-01	6.15E+00	6.15E+00	4
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	9.79E-01	8.85E-01	7.57E+00	7.57E+00	4
70	5.463	12.826	10	0.00E+00	0.00E+00	0.00E+00	6.67E-01	5.86E-01	5.04E+00	5.04E+00	3
71	5.648	12.900	10	0.00E+00	0.00E+00	0.00E+00	9.76E-01	9.11E-01	7.74E+00	7.74E+00	4
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	6.30E-01	5.59E-01	4.80E+00	4.80E+00	3
73	5.605	10.601	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-01	8.40E-01	8.40E-01	2
76	5.720	11.676	10	0.00E+00	0.00E+00	0.00E+00	2.21E-01	4.18E-01	3.24E+00	3.24E+00	3
77	5.601	11.699	10	0.00E+00	0.00E+00	0.00E+00	2.51E-01	4.33E-01	3.38E+00	3.38E+00	3
94	5.423	15.512	10	2.58E-01	3.84E+00	3.61E-01	7.39E-01	1.14E+01	8.08E+01	8.12E+01	8
95	5.601	15.674	10	5.30E-01	1.17E+01	7.42E-01	1.53E+00	3.42E+01	2.42E+02	2.42E+02	8
96	5.747	15.847	10	4.60E-01	1.53E+01	6.44E-01	1.33E+00	4.43E+01	3.12E+02	3.13E+02	8
97	5.610	14.388	10	1.19E-01	0.00E+00	1.67E-01	1.58E+00	4.86E+00	3.62E+01	3.64E+01	6
98	5.554	14.447	10	1.69E-01	1.09E-02	2.37E-01	1.57E+00	5.29E+00	3.92E+01	3.95E+01	6
99	5.616	14.500	10	2.06E-01	2.33E-02	2.88E-01	1.58E+00	5.72E+00	4.23E+01	4.25E+01	6
100	5.667	14.564	10	2.53E-01	3.79E-02	3.54E-01	1.59E+00	6.21E+00	4.57E+01	4.61E+01	6
101	5.392	13.905	10	0.00E+00	0.00E+00	0.00E+00	4.40E-01	6.54E-01	5.19E+00	5.19E+00	3
102	5.474	13.777	10	0.00E+00	0.00E+00	0.00E+00	1.10E+00	1.32E+00	1.08E+01	1.08E+01	4
103	5.406	13.666	10	0.00E+00	0.00E+00	0.00E+00	5.34E-01	6.25E-01	5.12E+00	5.12E+00	3
104	5.461	13.842	10	5.10E-05	0.00E+00	7.14E-05	1.03E+00	1.32E+00	1.07E+01	1.07E+01	4
105	5.476	13.706	10	0.00E+00	0.00E+00	0.00E+00	1.10E+00	1.24E+00	1.02E+01	1.02E+01	4
106	5.642	13.947	10	1.20E-04	0.00E+00	1.68E-04	1.46E+00	2.24E+00	1.77E+01	1.77E+01	5
107	5.653	13.814	10	3.91E-06	0.00E+00	5.47E-06	1.43E+00	1.84E+00	1.49E+01	1.49E+01	4
108	5.627	14.130	10	1.56E-02	0.00E+00	2.18E-02	1.52E+00	3.08E+00	2.37E+01	2.37E+01	5
109	5.702	14.036	10	4.30E-03	0.00E+00	6.02E-03	1.48E+00	2.56E+00	2.00E+01	2.00E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

110	5.702	12.379	10	0.00E+00	0.00E+00	0.00E+00	6.27E-01	5.40E-01	4.66E+00	4.66E+00	3
111	5.784	12.296	10	0.00E+00	0.00E+00	0.00E+00	5.52E-01	5.03E-01	4.29E+00	4.29E+00	3
112	5.875	12.255	10	0.00E+00	0.00E+00	0.00E+00	5.28E-01	4.47E-01	3.87E+00	3.87E+00	3
113	5.966	12.148	10	0.00E+00	0.00E+00	0.00E+00	4.21E-01	3.15E-01	2.79E+00	2.79E+00	2
120	6.033	14.438	10	6.52E-02	2.41E-03	9.13E-02	6.99E-01	2.45E+00	1.81E+01	1.82E+01	5
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	4.87E-01	4.56E-01	3.87E+00	3.87E+00	3
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	9.67E-01	8.38E-01	7.22E+00	7.22E+00	4
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	4.53E-01	4.29E-01	3.64E+00	3.64E+00	3
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	9.09E-01	7.92E-01	6.82E+00	6.82E+00	4
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.40E-01	8.12E+00	8.12E+00	4
126	5.793	13.170	10	0.00E+00	0.00E+00	0.00E+00	1.15E+00	9.76E-01	8.44E+00	8.44E+00	4
127	5.789	13.080	10	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.71E-01	8.34E+00	8.34E+00	4
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	1.07E+00	8.85E-01	7.69E+00	7.69E+00	4
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	7.11E-01	7.03E-01	5.92E+00	5.92E+00	3
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	7.57E-01	6.87E-01	5.87E+00	5.87E+00	3
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	6.86E-01	6.06E-01	5.20E+00	5.20E+00	3
132	6.074	13.908	10	0.00E+00	0.00E+00	0.00E+00	3.12E-01	5.46E-01	4.26E+00	4.26E+00	3
133	6.062	13.731	10	0.00E+00	0.00E+00	0.00E+00	3.90E-01	5.37E-01	4.31E+00	4.31E+00	3
134	6.072	13.821	10	0.00E+00	0.00E+00	0.00E+00	3.23E-01	5.05E-01	3.99E+00	3.99E+00	3
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	8.39E-01	8.01E-01	6.78E+00	6.78E+00	4
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	8.49E-01	8.26E-01	6.97E+00	6.97E+00	4
194	5.504	12.164	7	0.00E+00	0.00E+00	0.00E+00	4.87E-01	3.84E-01	3.37E+00	3.37E+00	3
195	5.583	12.163	7	0.00E+00	0.00E+00	0.00E+00	4.89E-01	4.53E-01	3.86E+00	3.86E+00	3
210	5.928	14.339	8	7.77E-02	0.00E+00	1.09E-01	1.50E+00	4.24E+00	3.18E+01	3.19E+01	6
211	5.764	13.557	8	0.00E+00	0.00E+00	0.00E+00	1.35E+00	1.42E+00	1.18E+01	1.18E+01	4
212	5.766	13.622	8	0.00E+00	0.00E+00	0.00E+00	1.37E+00	1.52E+00	1.26E+01	1.26E+01	4
213	5.767	13.674	8	0.00E+00	0.00E+00	0.00E+00	1.39E+00	1.61E+00	1.32E+01	1.32E+01	4
214	5.958	13.839	8	0.00E+00	0.00E+00	0.00E+00	1.23E+00	1.63E+00	1.31E+01	1.31E+01	4
215	5.913	13.903	8	0.00E+00	0.00E+00	0.00E+00	1.39E+00	2.04E+00	1.62E+01	1.62E+01	5
216	5.912	13.851	8	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.90E+00	1.52E+01	1.52E+01	5
231	5.991	14.398	10	8.18E-02	0.00E+00	1.15E-01	1.15E+00	3.52E+00	2.63E+01	2.64E+01	5
232	6.000	14.484	10	1.25E-01	1.57E-02	1.75E-01	1.09E+00	3.77E+00	2.79E+01	2.81E+01	5
233	6.059	14.191	10	5.33E-03	0.00E+00	7.46E-03	4.38E-01	1.13E+00	8.52E+00	8.53E+00	4
234	6.048	14.352	10	3.20E-02	0.00E+00	4.48E-02	5.29E-01	1.73E+00	1.29E+01	1.29E+01	4
235	5.928	14.253	10	4.00E-02	0.00E+00	5.60E-02	1.48E+00	3.63E+00	2.75E+01	2.75E+01	5
236	5.995	14.318	10	5.30E-02	0.00E+00	7.42E-02	1.10E+00	3.00E+00	2.25E+01	2.25E+01	5
240	5.917	14.848	10	4.31E-01	8.54E-01	6.03E-01	1.57E+00	8.07E+00	5.87E+01	5.93E+01	7
241	5.911	14.774	10	3.91E-01	4.44E-01	5.47E-01	1.58E+00	7.45E+00	5.44E+01	5.49E+01	7
242	5.917	14.700	10	3.35E-01	2.73E-01	4.69E-01	1.56E+00	6.91E+00	5.06E+01	5.10E+01	7
264	6.044	15.980	10	9.75E-02	5.91E+00	1.37E-01	2.80E-01	1.70E+01	1.19E+02	1.20E+02	8
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	7.81E-01	6.73E-01	5.80E+00	5.80E+00	3
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	1.09E+00	8.68E-01	7.60E+00	7.60E+00	4
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	1.16E+00	9.90E-01	8.55E+00	8.55E+00	4
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	4.04E-01	4.08E-01	3.42E+00	3.42E+00	3
296	5.537	12.816	10	0.00E+00	0.00E+00	0.00E+00	8.98E-01	8.04E-01	6.89E+00	6.89E+00	4
297	5.496	12.799	10	0.00E+00	0.00E+00	0.00E+00	8.30E-01	7.06E-01	6.10E+00	6.10E+00	4
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	9.79E-01	8.83E-01	7.55E+00	7.55E+00	4
299	5.615	12.839	10	0.00E+00	0.00E+00	0.00E+00	9.38E-01	8.98E-01	7.60E+00	7.60E+00	4
300	5.608	12.984	10	0.00E+00	0.00E+00	0.00E+00	1.03E+00	9.51E-01	8.10E+00	8.10E+00	4
304	5.755	11.682	10	0.00E+00	0.00E+00	0.00E+00	2.19E-01	4.02E-01	3.12E+00	3.12E+00	3
305	5.635	11.734	10	0.00E+00	0.00E+00	0.00E+00	2.58E-01	4.15E-01	3.27E+00	3.27E+00	3
306	5.353	11.802	10	0.00E+00	0.00E+00	0.00E+00	5.12E-03	9.99E-03	7.71E-02	7.71E-02	1
322	5.324	15.511	10	4.19E-04	1.47E-01	5.87E-04	1.20E-03	4.44E-01	3.11E+00	3.11E+00	3
323	5.639	15.789	10	4.85E-01	1.38E+01	6.79E-01	1.40E+00	3.99E+01	2.81E+02	2.82E+02	8
324	5.484	15.661	10	4.93E-01	1.01E+01	6.90E-01	1.41E+00	2.95E+01	2.08E+02	2.09E+02	8
325	5.702	14.442	10	1.50E-01	9.79E-03	2.10E-01	1.56E+00	5.28E+00	3.91E+01	3.94E+01	6
326	5.689	14.515	10	2.10E-01	2.67E-02	2.94E-01	1.57E+00	5.84E+00	4.31E+01	4.34E+01	6
327	5.512	14.539	10	2.39E-01	3.20E-02	3.35E-01	1.52E+00	5.49E+00	4.06E+01	4.09E+01	6
328	5.636	14.371	10	1.11E-01	0.00E+00	1.55E-01	1.58E+00	4.74E+00	3.54E+01	3.55E+01	6
329	5.419	13.723	10	0.00E+00	0.00E+00	0.00E+00	6.54E-01	7.77E-01	6.35E+00	6.35E+00	4
330	5.408	13.795	10	0.00E+00	0.00E+00	0.00E+00	5.68E-01	7.22E-01	5.85E+00	5.85E+00	3
331	5.493	13.630	10	0.00E+00	0.00E+00	0.00E+00	1.19E+00	1.27E+00	1.06E+01	1.06E+01	4
332	5.361	13.699	10	0.00E+00	0.00E+00	0.00E+00	2.17E-01	2.84E-01	2.29E+00	2.29E+00	2
333	5.363	13.843	10	0.00E+00	0.00E+00	0.00E+00	2.33E-01	3.45E-01	2.74E+00	2.74E+00	2
334	5.691	13.943	10	5.45E-04	0.00E+00	7.63E-04	1.45E+00	2.22E+00	1.76E+01	1.76E+01	5
335	5.690	14.073	10	8.05E-03	0.00E+00	1.13E-02	1.49E+00	2.76E+00	2.14E+01	2.14E+01	5
336	5.654	14.156	10	1.90E-02	0.00E+00	2.66E-02	1.53E+00	3.25E+00	2.49E+01	2.49E+01	5
337	5.627	13.811	10	2.57E-05	0.00E+00	3.60E-05	1.43E+00	1.84E+00	1.49E+01	1.49E+01	4
338	5.888	12.262	10	0.00E+00	0.00E+00	0.00E+00	5.33E-01	4.48E-01	3.88E+00	3.88E+00	3
339	5.993	12.248	10	0.00E+00	0.00E+00	0.00E+00	3.88E-01	3.03E-01	2.66E+00	2.66E+00	2
340	5.752	12.293	10	0.00E+00	0.00E+00	0.00E+00	5.51E-01	5.11E-01	4.35E+00	4.35E+00	3
341	5.706	12.340	10	0.00E+00	0.00E+00	0.00E+00	5.98E-01	5.25E-01	4.51E+00	4.51E+00	3
348	6.048	14.515	10	6.99E-02	8.59E-04	9.79E-02	5.24E-01	2.16E+00	1.59E+01	1.60E+01	5
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	3.47E-01	3.54E-01	2.96E+00	2.96E+00	2

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	4.46E-01	4.28E-01	3.62E+00	3.62E+00	3
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	8.64E-01	7.40E-01	6.39E+00	6.39E+00	4
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	8.82E-01	7.52E-01	6.50E+00	6.50E+00	4
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	1.08E+00	9.42E-01	8.11E+00	8.11E+00	4
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.13E+00	9.09E-01	7.95E+00	7.95E+00	4
355	5.823	13.093	10	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.81E-01	8.41E+00	8.41E+00	4
356	5.820	13.172	10	0.00E+00	0.00E+00	0.00E+00	1.15E+00	9.92E-01	8.55E+00	8.55E+00	4
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	5.47E-01	5.64E-01	4.71E+00	4.71E+00	3
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	5.47E-01	5.22E-01	4.42E+00	4.42E+00	3
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	5.07E-01	4.79E-01	4.06E+00	4.06E+00	3
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	1.26E-02	2.46E-02	1.90E-01	1.90E-01	1
362	6.119	13.900	10	0.00E+00	0.00E+00	0.00E+00	7.61E-02	1.72E-01	1.31E+00	1.31E+00	2
416	5.798	12.686	7	0.00E+00	0.00E+00	0.00E+00	8.44E-01	7.94E-01	6.74E+00	6.74E+00	4
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	8.57E-01	7.94E-01	6.76E+00	6.76E+00	4
420	5.601	12.207	7	0.00E+00	0.00E+00	0.00E+00	5.16E-01	4.73E-01	4.03E+00	4.03E+00	3
421	5.517	12.227	7	0.00E+00	0.00E+00	0.00E+00	5.19E-01	4.10E-01	3.60E+00	3.60E+00	3
442	5.998	14.225	8	2.19E-02	0.00E+00	3.07E-02	1.05E+00	2.45E+00	1.86E+01	1.87E+01	5
443	5.724	13.641	8	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.54E+00	1.27E+01	1.27E+01	4
444	5.772	13.525	8	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.37E+00	1.15E+01	1.15E+01	4
445	5.724	13.585	8	0.00E+00	0.00E+00	0.00E+00	1.37E+00	1.45E+00	1.21E+01	1.21E+01	4
446	5.932	13.871	8	0.00E+00	0.00E+00	0.00E+00	1.34E+00	1.87E+00	1.50E+01	1.50E+01	4
447	5.920	13.941	8	0.00E+00	0.00E+00	0.00E+00	1.39E+00	2.11E+00	1.67E+01	1.67E+01	5
448	5.927	13.817	8	0.00E+00	0.00E+00	0.00E+00	1.33E+00	1.74E+00	1.40E+01	1.40E+01	4

VX 250kg TBM
Light Attack
Height of Release: 500m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected 1 round at aimpoint (6.40, 18.00)											
1	6.093	14.476	10	9.35E-02	1.42E+00	1.31E-01	9.35E-02	1.42E+00	1.01E+01	1.02E+01	4
2	6.092	14.323	10	1.04E-01	1.91E+00	1.46E-01	1.04E-01	1.91E+00	1.35E+01	1.37E+01	4
3	6.056	14.272	10	6.60E-02	5.92E-01	9.24E-02	6.60E-02	5.92E-01	4.24E+00	4.33E+00	3
4	5.928	14.340	10	1.90E-05	0.00E+00	2.66E-05	1.90E-05	0.00E+00	2.66E-05	5.32E-05	1
5	5.996	14.233	10	6.76E-05	0.00E+00	9.46E-05	6.76E-05	0.00E+00	9.46E-05	1.89E-04	1
6	5.940	14.453	10	2.62E-05	0.00E+00	3.67E-05	2.62E-05	0.00E+00	3.67E-05	7.34E-05	1
7	6.585	14.474	10	6.67E-01	2.25E+01	9.34E-01	6.67E-01	2.25E+01	1.58E+02	1.59E+02	8
8	6.596	14.509	10	5.26E-01	1.79E+01	7.36E-01	5.26E-01	1.79E+01	1.26E+02	1.27E+02	8
9	6.650	14.552	10	2.80E-01	5.53E+00	3.92E-01	2.80E-01	5.53E+00	3.91E+01	3.95E+01	6
26	6.794	15.032	10	3.15E-03	0.00E+00	4.41E-03	3.15E-03	0.00E+00	4.41E-03	8.82E-03	1
27	6.641	15.084	10	1.86E-01	3.17E+00	2.60E-01	1.86E-01	3.17E+00	2.25E+01	2.27E+01	5
30	6.729	15.784	10	2.43E-05	0.00E+00	3.40E-05	2.43E-05	0.00E+00	3.40E-05	6.80E-05	1
31	6.590	15.868	10	1.40E-01	1.86E+00	1.96E-01	1.40E-01	1.86E+00	1.32E+01	1.34E+01	4
32	6.409	15.662	10	3.24E+00	1.64E+02	4.54E+00	3.24E+00	1.64E+02	1.15E+03	1.16E+03	8
33	6.293	15.680	10	1.07E+00	4.84E+01	1.50E+00	1.07E+00	4.84E+01	3.40E+02	3.42E+02	8
34	6.177	16.004	10	3.23E-02	0.00E+00	4.52E-02	3.23E-02	0.00E+00	4.52E-02	9.04E-02	1
36	6.098	15.997	10	2.19E-05	0.00E+00	3.07E-05	2.19E-05	0.00E+00	3.07E-05	6.13E-05	1
57	7.025	11.693	10	4.99E-05	0.00E+00	6.99E-05	4.99E-05	0.00E+00	6.99E-05	1.40E-04	1
58	6.946	11.700	10	3.75E-02	3.03E-02	5.25E-02	3.75E-02	3.03E-02	2.65E-01	3.17E-01	2
64	6.971	13.252	10	1.14E-05	0.00E+00	1.60E-05	1.14E-05	0.00E+00	1.60E-05	3.19E-05	1
66	6.985	13.799	10	1.58E-06	0.00E+00	2.21E-06	1.58E-06	0.00E+00	2.21E-06	4.42E-06	1
74	6.419	11.658	10	1.28E+00	3.35E+01	1.79E+00	1.28E+00	3.35E+01	2.36E+02	2.38E+02	8
75	6.278	11.645	10	1.04E+00	2.66E+01	1.46E+00	1.04E+00	2.66E+01	1.88E+02	1.89E+02	8
76	5.720	11.676	10	1.36E-05	0.00E+00	1.90E-05	1.36E-05	0.00E+00	1.90E-05	3.81E-05	1
80	6.177	11.646	10	6.03E-01	1.56E+01	8.44E-01	6.03E-01	1.56E+01	1.10E+02	1.11E+02	8
110	5.702	12.379	10	3.95E-08	0.00E+00	5.53E-08	3.95E-08	0.00E+00	5.53E-08	1.11E-07	1
111	5.784	12.296	10	8.22E-06	0.00E+00	1.15E-05	8.22E-06	0.00E+00	1.15E-05	2.30E-05	1
112	5.875	12.255	10	1.08E-02	0.00E+00	1.51E-02	1.08E-02	0.00E+00	1.51E-02	3.02E-02	1
113	5.966	12.148	10	9.63E-02	1.32E+00	1.35E-01	9.63E-02	1.32E+00	9.37E+00	9.51E+00	4
114	6.916	12.806	10	5.30E-05	0.00E+00	7.42E-05	5.30E-05	0.00E+00	7.42E-05	1.48E-04	1
115	6.830	12.828	10	6.92E-02	7.42E-01	9.69E-02	6.92E-02	7.42E-01	5.29E+00	5.39E+00	3
116	6.756	12.888	10	1.55E-01	3.13E+00	2.17E-01	1.55E-01	3.13E+00	2.21E+01	2.23E+01	5
117	6.725	12.972	10	1.90E-01	5.03E+00	2.66E-01	1.90E-01	5.03E+00	3.55E+01	3.57E+01	6
118	6.694	13.408	10	2.17E-01	6.39E+00	3.04E-01	2.17E-01	6.39E+00	4.50E+01	4.53E+01	6
119	6.704	13.497	10	1.73E-01	5.07E+00	2.42E-01	1.73E-01	5.07E+00	3.57E+01	3.60E+01	6
120	6.033	14.438	10	3.43E-02	0.00E+00	4.80E-02	3.43E-02	0.00E+00	4.80E-02	9.60E-02	1
121	6.032	12.989	10	1.31E-01	2.48E+00	1.83E-01	1.31E-01	2.48E+00	1.75E+01	1.77E+01	5
122	5.929	12.964	10	2.61E-02	3.71E-02	3.65E-02	2.61E-02	3.71E-02	2.96E-01	3.33E-01	2
123	6.033	12.883	10	1.40E-01	2.69E+00	1.96E-01	1.40E-01	2.69E+00	1.90E+01	1.92E+01	5
124	5.934	12.874	10	3.26E-02	1.52E-01	4.56E-02	3.26E-02	1.52E-01	1.11E+00	1.16E+00	2

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

125	5.888	13.090	10	4.21E-05	0.00E+00	5.89E-05	4.21E-05	0.00E+00	5.89E-05	1.18E-04	1
128	5.929	13.162	10	2.23E-02	0.00E+00	3.12E-02	2.23E-02	0.00E+00	3.12E-02	6.24E-02	1
129	6.018	13.474	10	7.25E-02	1.12E+00	1.02E-01	7.25E-02	1.12E+00	7.94E+00	8.04E+00	4
130	6.010	13.396	10	6.91E-02	9.91E-01	9.67E-02	6.91E-02	9.91E-01	7.03E+00	7.13E+00	4
131	6.016	13.310	10	8.46E-02	1.33E+00	1.18E-01	8.46E-02	1.33E+00	9.43E+00	9.55E+00	4
132	6.074	13.908	10	1.12E-01	2.45E+00	1.57E-01	1.12E-01	2.45E+00	1.73E+01	1.75E+01	5
133	6.062	13.731	10	1.09E-01	2.23E+00	1.53E-01	1.09E-01	2.23E+00	1.58E+01	1.59E+01	5
134	6.072	13.821	10	1.16E-01	2.57E+00	1.62E-01	1.16E-01	2.57E+00	1.82E+01	1.83E+01	5
170	6.850	14.458	7	3.26E-05	0.00E+00	4.56E-05	3.26E-05	0.00E+00	4.56E-05	9.13E-05	1
171	6.764	14.472	7	3.64E-02	0.00E+00	5.10E-02	3.64E-02	0.00E+00	5.10E-02	1.02E-01	1
175	6.863	14.788	7	2.14E-05	0.00E+00	3.00E-05	2.14E-05	0.00E+00	3.00E-05	5.99E-05	1
176	6.271	15.463	7	9.83E-01	3.69E+01	1.38E+00	9.83E-01	3.69E+01	2.60E+02	2.61E+02	8
177	6.321	15.463	7	1.75E+00	8.72E+01	2.45E+00	1.75E+00	8.72E+01	6.13E+02	6.15E+02	8
190	5.817	12.688	7	1.18E-05	0.00E+00	1.65E-05	1.18E-05	0.00E+00	1.65E-05	3.30E-05	1
191	5.850	12.720	7	3.39E-05	0.00E+00	4.75E-05	3.39E-05	0.00E+00	4.75E-05	9.49E-05	1
200	6.741	13.475	7	1.26E-01	2.70E+00	1.76E-01	1.26E-01	2.70E+00	1.91E+01	1.93E+01	5
201	6.796	13.214	7	7.81E-02	1.05E+00	1.09E-01	7.81E-02	1.05E+00	7.46E+00	7.57E+00	4
202	6.778	13.317	7	9.17E-02	1.52E+00	1.28E-01	9.17E-02	1.52E+00	1.08E+01	1.09E+01	4
203	6.788	13.359	7	7.51E-02	1.11E+00	1.05E-01	7.51E-02	1.11E+00	7.88E+00	7.98E+00	4
206	6.739	13.622	7	1.17E-01	2.44E+00	1.64E-01	1.17E-01	2.44E+00	1.72E+01	1.74E+01	5
207	6.879	13.872	7	2.52E-03	0.00E+00	3.53E-03	2.52E-03	0.00E+00	3.53E-03	7.06E-03	1
210	5.928	14.339	8	1.90E-05	0.00E+00	2.66E-05	1.90E-05	0.00E+00	2.66E-05	5.32E-05	1
214	5.958	13.839	8	8.72E-03	0.00E+00	1.22E-02	8.72E-03	0.00E+00	1.22E-02	2.44E-02	1
215	5.913	13.903	8	1.19E-03	0.00E+00	1.67E-03	1.19E-03	0.00E+00	1.67E-03	3.33E-03	1
216	5.912	13.851	8	1.68E-03	0.00E+00	2.35E-03	1.68E-03	0.00E+00	2.35E-03	4.70E-03	1
231	5.991	14.398	10	6.06E-05	0.00E+00	8.48E-05	6.06E-05	0.00E+00	8.48E-05	1.70E-04	1
232	6.000	14.484	10	6.47E-05	0.00E+00	9.06E-05	6.47E-05	0.00E+00	9.06E-05	1.81E-04	1
233	6.059	14.191	10	7.36E-02	9.51E-01	1.03E-01	7.36E-02	9.51E-01	6.76E+00	6.86E+00	4
234	6.048	14.352	10	5.34E-02	1.22E-01	7.48E-02	5.34E-02	1.22E-01	9.29E-01	1.00E+00	2
235	5.928	14.253	10	1.96E-05	0.00E+00	2.74E-05	1.96E-05	0.00E+00	2.74E-05	5.49E-05	1
236	5.995	14.318	10	6.50E-05	0.00E+00	9.10E-05	6.50E-05	0.00E+00	9.10E-05	1.82E-04	1
237	6.729	14.564	10	6.61E-02	5.68E-01	9.25E-02	6.61E-02	5.68E-01	4.07E+00	4.16E+00	3
238	6.663	14.478	10	2.44E-01	4.89E+00	3.42E-01	2.44E-01	4.89E+00	3.46E+01	3.49E+01	6
239	6.637	14.483	10	3.43E-01	8.74E+00	4.80E-01	3.43E-01	8.74E+00	6.17E+01	6.21E+01	7
240	5.917	14.848	10	9.19E-06	0.00E+00	1.29E-05	9.19E-06	0.00E+00	1.29E-05	2.57E-05	1
241	5.911	14.774	10	6.39E-06	0.00E+00	8.95E-06	6.39E-06	0.00E+00	8.95E-06	1.79E-05	1
242	5.917	14.700	10	1.02E-05	0.00E+00	1.43E-05	1.02E-05	0.00E+00	1.43E-05	2.86E-05	1
255	6.893	14.961	10	3.22E-06	0.00E+00	4.51E-06	3.22E-06	0.00E+00	4.51E-06	9.02E-06	1
256	6.712	15.037	10	4.52E-02	0.00E+00	6.33E-02	4.52E-02	0.00E+00	6.33E-02	1.27E-01	1
257	6.799	14.963	10	6.27E-04	0.00E+00	8.78E-04	6.27E-04	0.00E+00	8.78E-04	1.76E-03	1
259	6.679	15.833	10	1.26E-02	0.00E+00	1.76E-02	1.26E-02	0.00E+00	1.76E-02	3.53E-02	1
260	6.524	15.940	10	6.22E-01	2.34E+01	8.71E-01	6.22E-01	2.34E+01	1.65E+02	1.66E+02	8
261	6.241	15.673	10	5.19E-01	1.11E+01	7.27E-01	5.19E-01	1.11E+01	7.84E+01	7.92E+01	8
262	6.476	15.623	10	1.75E+00	9.11E+01	2.45E+00	1.75E+00	9.11E+01	6.40E+02	6.43E+02	8
263	6.334	15.995	10	1.68E+00	9.93E+01	2.35E+00	1.68E+00	9.93E+01	6.97E+02	7.00E+02	8
264	6.044	15.980	10	1.03E-05	0.00E+00	1.44E-05	1.03E-05	0.00E+00	1.44E-05	2.88E-05	1
265	6.660	15.900	10	2.12E-02	0.00E+00	2.97E-02	2.12E-02	0.00E+00	2.97E-02	5.94E-02	1
285	7.016	11.743	10	5.19E-05	0.00E+00	7.27E-05	5.19E-05	0.00E+00	7.27E-05	1.45E-04	1
291	6.927	13.730	10	1.03E-05	0.00E+00	1.44E-05	1.03E-05	0.00E+00	1.44E-05	2.88E-05	1
302	6.396	11.688	10	1.32E+00	3.42E+01	1.85E+00	1.32E+00	3.42E+01	2.41E+02	2.43E+02	8
303	6.276	11.651	10	1.03E+00	2.65E+01	1.44E+00	1.03E+00	2.65E+01	1.87E+02	1.88E+02	8
304	5.755	11.682	10	3.72E-05	0.00E+00	5.21E-05	3.72E-05	0.00E+00	5.21E-05	1.04E-04	1
338	5.888	12.262	10	1.21E-02	0.00E+00	1.69E-02	1.21E-02	0.00E+00	1.69E-02	3.39E-02	1
339	5.993	12.248	10	1.23E-01	1.94E+00	1.72E-01	1.23E-01	1.94E+00	1.38E+01	1.39E+01	4
340	5.752	12.293	10	5.24E-06	0.00E+00	7.34E-06	5.24E-06	0.00E+00	7.34E-06	1.47E-05	1
341	5.706	12.340	10	3.39E-07	0.00E+00	4.75E-07	3.39E-07	0.00E+00	4.75E-07	9.49E-07	1
342	6.849	12.996	10	4.48E-02	3.11E-02	6.27E-02	4.48E-02	3.11E-02	2.80E-01	3.43E-01	2
343	6.900	12.944	10	5.57E-05	0.00E+00	7.80E-05	5.57E-05	0.00E+00	7.80E-05	1.56E-04	1
344	6.866	12.886	10	3.24E-02	1.38E-01	4.54E-02	3.24E-02	1.38E-01	1.01E+00	1.06E+00	2
345	6.785	13.015	10	1.06E-01	1.77E+00	1.48E-01	1.06E-01	1.77E+00	1.25E+01	1.27E+01	4
346	6.814	13.529	10	3.77E-02	3.50E-01	5.28E-02	3.77E-02	3.50E-01	2.50E+00	2.56E+00	2
347	6.740	13.527	10	1.23E-01	2.62E+00	1.72E-01	1.23E-01	2.62E+00	1.85E+01	1.87E+01	5
348	6.048	14.515	10	4.67E-02	0.00E+00	6.54E-02	4.67E-02	0.00E+00	6.54E-02	1.31E-01	1
349	6.052	12.911	10	1.64E-01	3.48E+00	2.30E-01	1.64E-01	3.48E+00	2.46E+01	2.48E+01	5
350	6.039	13.007	10	1.39E-01	2.72E+00	1.95E-01	1.39E-01	2.72E+00	1.92E+01	1.94E+01	5
351	5.955	12.889	10	5.22E-02	3.10E-01	7.31E-02	5.22E-02	3.10E-01	2.24E+00	2.32E+00	2
352	5.960	12.980	10	5.33E-02	2.73E-01	7.46E-02	5.33E-02	2.73E-01	1.99E+00	2.06E+00	2
353	5.884	13.058	10	4.16E-05	0.00E+00	5.82E-05	4.16E-05	0.00E+00	5.82E-05	1.16E-04	1
354	5.911	13.172	10	8.42E-03	0.00E+00	1.18E-02	8.42E-03	0.00E+00	1.18E-02	2.36E-02	1
355	5.823	13.093	10	1.10E-05	0.00E+00	1.54E-05	1.10E-05	0.00E+00	1.54E-05	3.08E-05	1
356	5.820	13.172	10	8.68E-06	0.00E+00	1.22E-05	8.68E-06	0.00E+00	1.22E-05	2.43E-05	1
357	6.039	13.482	10	9.93E-02	1.75E+00	1.39E-01	9.93E-02	1.75E+00	1.24E+01	1.25E+01	4
358	6.038	13.406	10	1.04E-01	1.89E+00	1.46E-01	1.04E-01	1.89E+00	1.34E+01	1.35E+01	4
359	6.041	13.323	10	1.15E-01	2.15E+00	1.61E-01	1.15E-01	2.15E+00	1.52E+01	1.54E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

360	6.145	13.753	10	3.87E-01	9.88E+00	5.42E-01	3.87E-01	9.88E+00	6.97E+01	7.02E+01	7
361	6.165	13.823	10	4.80E-01	1.34E+01	6.72E-01	4.80E-01	1.34E+01	9.45E+01	9.51E+01	8
362	6.119	13.900	10	2.43E-01	6.14E+00	3.40E-01	2.43E-01	6.14E+00	4.33E+01	4.37E+01	6
398	6.862	14.468	7	2.47E-05	0.00E+00	3.46E-05	2.47E-05	0.00E+00	3.46E-05	6.92E-05	1
399	6.809	14.467	7	5.92E-05	0.00E+00	8.29E-05	5.92E-05	0.00E+00	8.29E-05	1.66E-04	1
402	6.871	14.784	7	1.68E-05	0.00E+00	2.35E-05	1.68E-05	0.00E+00	2.35E-05	4.70E-05	1
404	6.339	15.451	7	2.11E+00	1.09E+02	2.95E+00	2.11E+00	1.09E+02	7.66E+02	7.69E+02	8
405	6.245	15.441	7	6.84E-01	1.83E+01	9.58E-01	6.84E-01	1.83E+01	1.29E+02	1.30E+02	8
417	5.881	12.714	7	5.51E-05	0.00E+00	7.71E-05	5.51E-05	0.00E+00	7.71E-05	1.54E-04	1
426	6.795	13.441	7	5.85E-02	7.63E-01	8.19E-02	5.85E-02	7.63E-01	5.42E+00	5.50E+00	3
427	6.756	13.385	7	1.14E-01	2.13E+00	1.60E-01	1.14E-01	2.13E+00	1.51E+01	1.52E+01	5
428	6.744	13.296	7	1.37E-01	2.93E+00	1.92E-01	1.37E-01	2.93E+00	2.07E+01	2.09E+01	5
429	6.741	13.225	7	1.46E-01	3.30E+00	2.04E-01	1.46E-01	3.30E+00	2.33E+01	2.35E+01	5
432	6.970	13.918	7	1.29E-06	0.00E+00	1.81E-06	1.29E-06	0.00E+00	1.81E-06	3.61E-06	1
433	6.824	14.074	7	5.63E-05	0.00E+00	7.88E-05	5.63E-05	0.00E+00	7.88E-05	1.58E-04	1
442	5.998	14.225	8	6.92E-05	0.00E+00	9.69E-05	6.92E-05	0.00E+00	9.69E-05	1.94E-04	1
446	5.932	13.871	8	3.86E-03	0.00E+00	5.40E-03	3.86E-03	0.00E+00	5.40E-03	1.08E-02	1
447	5.920	13.941	8	1.11E-03	0.00E+00	1.55E-03	1.11E-03	0.00E+00	1.55E-03	3.11E-03	1
448	5.927	13.817	8	4.62E-03	0.00E+00	6.47E-03	4.62E-03	0.00E+00	6.47E-03	1.29E-02	1

Case 2: Protected 1 round at aimpoint (6.40, 18.00)

130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E+02	1.37E+03	1.37E+03	8
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E+02	1.17E+03	1.17E+03	8
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+02	9.31E+02	9.31E+02	8
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E+02	7.42E+02	7.42E+02	8
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E+01	6.52E+02	6.52E+02	8
442	5.998	14.225	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E+01	5.96E+02	5.96E+02	8
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E+01	5.58E+02	5.58E+02	8
5	5.996	14.233	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.79E+01	5.45E+02	5.45E+02	8
236	5.995	14.318	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E+01	2.62E+02	2.62E+02	8
214	5.958	13.839	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E+01	2.58E+02	2.58E+02	8
128	5.929	13.162	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E+01	1.44E+02	1.44E+02	8
133	6.062	13.731	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E+01	8.75E+01	8.75E+01	8
354	5.911	13.172	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E+00	6.98E+01	6.98E+01	7
134	6.072	13.821	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E+00	2.53E+01	2.53E+01	5
448	5.927	13.817	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E+00	2.49E+01	2.49E+01	5
446	5.932	13.871	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E+00	2.08E+01	2.08E+01	5
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E+00	1.31E+01	1.31E+01	4
132	6.074	13.908	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E+00	1.20E+01	1.20E+01	4
216	5.912	13.851	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E+00	9.03E+00	9.03E+00	4
125	5.888	13.090	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E+00	7.70E+00	7.70E+00	4
234	6.048	14.352	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.73E-01	6.81E+00	6.81E+00	4
215	5.913	13.903	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-01	6.36E+00	6.36E+00	4
447	5.920	13.941	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.49E-01	5.94E+00	5.94E+00	3
231	5.991	14.398	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-01	5.82E+00	5.82E+00	3
353	5.884	13.058	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-01	4.45E+00	4.45E+00	3

VX 500kg TBM
Moderate Attack
Height of Release: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Inhalation			Percutaneous			Total	Injury Severity Category
				Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	
Case 1: Unprotected 2 rounds at aimpoint (7.65, 18.00)											
1	6.093	14.476	10	7.19E-02	3.23E+00	1.01E-01	7.19E-02	3.23E+00	2.27E+01	2.28E+01	5
2	6.092	14.323	10	8.17E-02	3.44E+00	1.14E-01	8.17E-02	3.44E+00	2.42E+01	2.43E+01	5
3	6.056	14.272	10	7.88E-02	3.00E+00	1.10E-01	7.88E-02	3.00E+00	2.11E+01	2.12E+01	5
4	5.928	14.340	10	4.14E-02	1.84E+00	5.80E-02	4.14E-02	1.84E+00	1.29E+01	1.30E+01	4
5	5.996	14.233	10	6.54E-02	2.53E+00	9.16E-02	6.54E-02	2.53E+00	1.78E+01	1.79E+01	5
6	5.940	14.453	10	3.90E-02	1.79E+00	5.46E-02	3.90E-02	1.79E+00	1.26E+01	1.26E+01	4
7	6.585	14.474	10	1.79E-01	1.61E+01	2.51E-01	1.79E-01	1.61E+01	1.13E+02	1.13E+02	8
8	6.596	14.509	10	1.83E-01	1.66E+01	2.56E-01	1.83E-01	1.66E+01	1.16E+02	1.17E+02	8
9	6.650	14.552	10	2.11E-01	1.88E+01	2.95E-01	2.11E-01	1.88E+01	1.32E+02	1.32E+02	8
10	5.849	14.797	10	2.41E-03	6.71E-01	3.37E-03	2.41E-03	6.71E-01	4.70E+00	4.70E+00	3
11	5.840	14.745	10	4.30E-03	7.03E-01	6.02E-03	4.30E-03	7.03E-01	4.93E+00	4.93E+00	3
12	5.853	14.870	10	2.69E-03	5.95E-01	3.77E-03	2.69E-03	5.95E-01	4.17E+00	4.17E+00	3
13	7.493	16.157	10	6.05E-01	1.17E+02	8.47E-01	6.05E-01	1.17E+02	8.20E+02	8.21E+02	8
14	8.023	13.873	10	3.58E-01	5.01E+01	5.01E-01	3.58E-01	5.01E+01	3.51E+02	3.52E+02	8
15	7.973	14.025	10	4.03E-01	5.48E+01	5.64E-01	4.03E-01	5.48E+01	3.84E+02	3.85E+02	8
16	7.673	14.185	10	5.20E-01	6.28E+01	7.28E-01	5.20E-01	6.28E+01	4.40E+02	4.41E+02	8
17	7.567	14.260	10	4.85E-01	6.28E+01	6.79E-01	4.85E-01	6.28E+01	4.40E+02	4.41E+02	8
18	7.651	14.598	10	5.69E-01	7.54E+01	7.97E-01	5.69E-01	7.54E+01	5.29E+02	5.29E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

19	7.559	14.741	10	5.34E-01	7.68E+01	7.48E-01	5.34E-01	7.68E+01	5.38E+02	5.39E+02	8
20	7.494	14.816	10	5.03E-01	7.66E+01	7.04E-01	5.03E-01	7.66E+01	5.37E+02	5.38E+02	8
21	7.865	14.119	10	4.87E-01	6.02E+01	6.82E-01	4.87E-01	6.02E+01	4.22E+02	4.23E+02	8
22	7.105	15.339	10	3.56E-01	5.90E+01	4.98E-01	3.56E-01	5.90E+01	4.13E+02	4.14E+02	8
23	6.977	15.551	10	2.62E-01	4.77E+01	3.67E-01	2.62E-01	4.77E+01	3.34E+02	3.35E+02	8
24	7.408	14.972	10	4.96E-01	7.64E+01	6.94E-01	4.96E-01	7.64E+01	5.35E+02	5.36E+02	8
25	7.275	15.120	10	4.82E-01	7.05E+01	6.75E-01	4.82E-01	7.05E+01	4.94E+02	4.95E+02	8
26	6.794	15.032	10	2.29E-01	2.82E+01	3.21E-01	2.29E-01	2.82E+01	1.98E+02	1.98E+02	8
27	6.641	15.084	10	1.69E-01	1.77E+01	2.37E-01	1.69E-01	1.77E+01	1.24E+02	1.24E+02	8
28	6.960	14.900	10	3.06E-01	4.02E+01	4.28E-01	3.06E-01	4.02E+01	2.82E+02	2.82E+02	8
29	7.098	15.437	10	3.46E-01	6.00E+01	4.84E-01	3.46E-01	6.00E+01	4.20E+02	4.21E+02	8
30	6.729	15.784	10	1.28E-01	2.05E+01	1.79E-01	1.28E-01	2.05E+01	1.44E+02	1.44E+02	8
31	6.590	15.868	10	8.46E-02	9.97E+00	1.18E-01	8.46E-02	9.97E+00	6.99E+01	7.00E+01	7
32	6.409	15.662	10	6.64E-02	4.86E+00	9.30E-02	6.64E-02	4.86E+00	3.41E+01	3.42E+01	6
33	6.293	15.680	10	4.13E-02	2.56E+00	5.78E-02	4.13E-02	2.56E+00	1.80E+01	1.80E+01	5
34	6.177	16.004	10	1.14E-02	4.11E-01	1.60E-02	1.14E-02	4.11E-01	2.89E+00	2.91E+00	2
35	5.984	15.987	10	6.25E-06	0.00E+00	8.75E-06	6.25E-06	0.00E+00	8.75E-06	1.75E-05	1
36	6.098	15.997	10	4.40E-03	1.61E-01	6.16E-03	4.40E-03	1.61E-01	1.13E+00	1.14E+00	2
37	7.529	13.326	10	3.72E-01	4.18E+01	5.21E-01	3.72E-01	4.18E+01	2.93E+02	2.94E+02	8
38	7.483	13.327	10	3.88E-01	4.13E+01	5.43E-01	3.88E-01	4.13E+01	2.90E+02	2.90E+02	8
39	7.413	13.314	10	3.96E-01	3.97E+01	5.54E-01	3.96E-01	3.97E+01	2.78E+02	2.79E+02	8
40	5.550	13.245	10	7.99E-03	7.10E-01	1.12E-02	7.99E-03	7.10E-01	4.98E+00	4.99E+00	3
41	5.474	13.201	10	2.02E-03	4.74E-01	2.83E-03	2.02E-03	4.74E-01	3.32E+00	3.32E+00	3
42	5.507	13.288	10	4.33E-03	5.48E-01	6.06E-03	4.33E-03	5.48E-01	3.84E+00	3.85E+00	3
43	8.657	12.270	10	2.01E-01	1.48E+01	2.81E-01	2.01E-01	1.48E+01	1.04E+02	1.04E+02	8
44	8.029	13.502	10	3.38E-01	4.28E+01	4.73E-01	3.38E-01	4.28E+01	3.00E+02	3.01E+02	8
45	8.010	13.277	10	3.42E-01	3.94E+01	4.79E-01	3.42E-01	3.94E+01	2.76E+02	2.77E+02	8
46	7.967	13.123	10	3.45E-01	3.77E+01	4.83E-01	3.45E-01	3.77E+01	2.64E+02	2.65E+02	8
47	7.951	12.959	10	3.30E-01	3.55E+01	4.62E-01	3.30E-01	3.55E+01	2.49E+02	2.49E+02	8
48	7.859	12.806	10	3.08E-01	3.46E+01	4.31E-01	3.08E-01	3.46E+01	2.43E+02	2.43E+02	8
49	7.819	12.680	10	2.75E-01	3.31E+01	3.85E-01	2.75E-01	3.31E+01	2.32E+02	2.32E+02	8
50	8.022	13.625	10	3.47E-01	4.52E+01	4.86E-01	3.47E-01	4.52E+01	3.17E+02	3.17E+02	8
51	7.918	13.025	10	3.41E-01	3.69E+01	4.77E-01	3.41E-01	3.69E+01	2.59E+02	2.59E+02	8
52	7.782	12.305	10	2.36E-01	2.87E+01	3.30E-01	2.36E-01	2.87E+01	2.01E+02	2.02E+02	8
53	7.849	12.489	10	2.48E-01	3.07E+01	3.47E-01	2.48E-01	3.07E+01	2.15E+02	2.16E+02	8
54	7.712	12.136	10	2.30E-01	2.71E+01	3.22E-01	2.30E-01	2.71E+01	1.90E+02	1.90E+02	8
55	7.633	11.994	10	2.28E-01	2.57E+01	3.19E-01	2.28E-01	2.57E+01	1.80E+02	1.81E+02	8
56	7.360	11.854	10	2.62E-01	2.26E+01	3.67E-01	2.62E-01	2.26E+01	1.59E+02	1.59E+02	8
57	7.025	11.693	10	1.38E-01	1.73E+01	1.93E-01	1.38E-01	1.73E+01	1.21E+02	1.21E+02	8
58	6.946	11.700	10	1.54E-01	1.61E+01	2.16E-01	1.54E-01	1.61E+01	1.13E+02	1.13E+02	8
59	7.642	12.314	10	2.42E-01	2.90E+01	3.39E-01	2.42E-01	2.90E+01	2.03E+02	2.04E+02	8
60	7.504	13.516	10	3.97E-01	4.48E+01	5.56E-01	3.97E-01	4.48E+01	3.14E+02	3.15E+02	8
61	7.349	13.661	10	4.08E-01	4.36E+01	5.71E-01	4.08E-01	4.36E+01	3.06E+02	3.06E+02	8
62	7.197	13.780	10	3.88E-01	4.01E+01	5.43E-01	3.88E-01	4.01E+01	2.81E+02	2.82E+02	8
63	7.038	13.813	10	2.83E-01	3.38E+01	3.96E-01	2.83E-01	3.38E+01	2.37E+02	2.37E+02	8
64	6.971	13.252	10	2.29E-01	2.63E+01	3.21E-01	2.29E-01	2.63E+01	1.84E+02	1.85E+02	8
65	7.147	13.222	10	3.27E-01	3.15E+01	4.58E-01	3.27E-01	3.15E+01	2.21E+02	2.21E+02	8
66	6.985	13.799	10	2.63E-01	3.14E+01	3.68E-01	2.63E-01	3.14E+01	2.20E+02	2.21E+02	8
67	5.560	12.798	10	1.41E-02	9.39E-01	1.97E-02	1.41E-02	9.39E-01	6.59E+00	6.61E+00	4
68	5.483	12.959	10	5.21E-03	6.13E-01	7.29E-03	5.21E-03	6.13E-01	4.30E+00	4.31E+00	3
69	5.563	12.908	10	1.30E-02	9.03E-01	1.82E-02	1.30E-02	9.03E-01	6.34E+00	6.36E+00	4
70	5.463	12.826	10	4.69E-03	5.85E-01	6.57E-03	4.69E-03	5.85E-01	4.10E+00	4.11E+00	3
71	5.648	12.900	10	2.09E-02	1.20E+00	2.93E-02	2.09E-02	1.20E+00	8.43E+00	8.46E+00	4
72	5.451	12.890	10	2.97E-03	5.25E-01	4.16E-03	2.97E-03	5.25E-01	3.68E+00	3.68E+00	3
73	5.605	10.601	10	3.47E-02	1.31E+00	4.86E-02	3.47E-02	1.31E+00	9.22E+00	9.27E+00	4
74	6.419	11.658	10	1.75E-01	8.27E+00	2.45E-01	1.75E-01	8.27E+00	5.81E+01	5.84E+01	7
75	6.278	11.645	10	1.59E-01	6.54E+00	2.23E-01	1.59E-01	6.54E+00	4.60E+01	4.62E+01	6
76	5.720	11.676	10	5.48E-02	1.84E+00	7.67E-02	5.48E-02	1.84E+00	1.30E+01	1.30E+01	4
77	5.601	11.699	10	2.98E-02	1.29E+00	4.17E-02	2.98E-02	1.29E+00	9.07E+00	9.11E+00	4
78	5.331	11.805	10	4.37E-03	5.19E-01	6.12E-03	4.37E-03	5.19E-01	3.64E+00	3.65E+00	3
79	5.184	11.887	10	7.66E-04	2.11E-01	1.07E-03	7.66E-04	2.11E-01	1.48E+00	1.48E+00	2
80	6.177	11.646	10	1.30E-01	5.46E+00	1.82E-01	1.30E-01	5.46E+00	3.84E+01	3.86E+01	6
81	5.121	11.999	10	3.17E-04	1.06E-01	4.44E-04	3.17E-04	1.06E-01	7.42E-01	7.43E-01	2
96	5.747	15.847	10	2.56E-07	0.00E+00	3.58E-07	2.56E-07	0.00E+00	3.58E-07	7.17E-07	1
97	5.610	14.388	10	8.91E-04	2.06E-01	1.25E-03	8.91E-04	2.06E-01	1.44E+00	1.44E+00	2
98	5.554	14.447	10	4.96E-04	9.79E-02	6.94E-04	4.96E-04	9.79E-02	6.86E-01	6.87E-01	2
99	5.616	14.500	10	6.73E-04	1.02E-01	9.42E-04	6.73E-04	1.02E-01	7.15E-01	7.16E-01	2
100	5.667	14.564	10	1.59E-03	1.23E-01	2.23E-03	1.59E-03	1.23E-01	8.63E-01	8.65E-01	2
101	5.392	13.905	10	1.07E-06	0.00E+00	1.50E-06	1.07E-06	0.00E+00	1.50E-06	3.00E-06	1
102	5.474	13.777	10	7.51E-04	1.10E-01	1.05E-03	7.51E-04	1.10E-01	7.71E-01	7.72E-01	2
103	5.406	13.666	10	2.71E-06	1.06E-01	3.79E-06	2.71E-06	1.06E-01	7.42E-01	7.42E-01	2
104	5.461	13.842	10	2.80E-04	3.84E-02	3.92E-04	2.80E-04	3.84E-02	2.69E-01	2.70E-01	2
105	5.476	13.706	10	9.83E-04	1.85E-01	1.38E-03	9.83E-04	1.85E-01	1.30E+00	1.30E+00	2
106	5.642	13.947	10	3.00E-03	5.96E-01	4.20E-03	3.00E-03	5.96E-01	4.18E+00	4.18E+00	3

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

107	5.653	13.814	10	6.09E-03	7.34E-01	8.53E-03	6.09E-03	7.34E-01	5.15E+00	5.16E+00	3
108	5.627	14.130	10	1.60E-03	4.37E-01	2.24E-03	1.60E-03	4.37E-01	3.06E+00	3.06E+00	3
109	5.702	14.036	10	1.01E-02	8.09E-01	1.41E-02	1.01E-02	8.09E-01	5.68E+00	5.69E+00	3
110	5.702	12.379	10	4.11E-02	1.60E+00	5.75E-02	4.11E-02	1.60E+00	1.13E+01	1.13E+01	4
111	5.784	12.296	10	6.21E-02	2.04E+00	8.69E-02	6.21E-02	2.04E+00	1.44E+01	1.45E+01	4
112	5.875	12.255	10	8.23E-02	2.61E+00	1.15E-01	8.23E-02	2.61E+00	1.84E+01	1.85E+01	5
113	5.966	12.148	10	9.66E-02	3.48E+00	1.35E-01	9.66E-02	3.48E+00	2.45E+01	2.46E+01	5
114	6.916	12.806	10	1.75E-01	2.16E+01	2.45E-01	1.75E-01	2.16E+01	1.51E+02	1.52E+02	8
115	6.830	12.828	10	1.51E-01	1.94E+01	2.11E-01	1.51E-01	1.94E+01	1.36E+02	1.36E+02	8
116	6.756	12.888	10	1.60E-01	1.78E+01	2.24E-01	1.60E-01	1.78E+01	1.25E+02	1.25E+02	8
117	6.725	12.972	10	1.64E-01	1.74E+01	2.30E-01	1.64E-01	1.74E+01	1.22E+02	1.22E+02	8
118	6.694	13.408	10	1.84E-01	1.81E+01	2.58E-01	1.84E-01	1.81E+01	1.27E+02	1.27E+02	8
119	6.704	13.497	10	1.88E-01	1.87E+01	2.63E-01	1.88E-01	1.87E+01	1.31E+02	1.31E+02	8
120	6.033	14.438	10	6.33E-02	2.54E+00	8.86E-02	6.33E-02	2.54E+00	1.79E+01	1.80E+01	5
121	6.032	12.989	10	1.15E-01	3.88E+00	1.61E-01	1.15E-01	3.88E+00	2.73E+01	2.75E+01	5
122	5.929	12.964	10	8.72E-02	2.96E+00	1.22E-01	8.72E-02	2.96E+00	2.08E+01	2.10E+01	5
123	6.033	12.883	10	1.13E-01	3.94E+00	1.58E-01	1.13E-01	3.94E+00	2.77E+01	2.79E+01	5
124	5.934	12.874	10	8.84E-02	3.03E+00	1.24E-01	8.84E-02	3.03E+00	2.13E+01	2.15E+01	5
125	5.888	13.090	10	7.52E-02	2.52E+00	1.05E-01	7.52E-02	2.52E+00	1.77E+01	1.79E+01	5
126	5.793	13.170	10	4.96E-02	1.83E+00	6.94E-02	4.96E-02	1.83E+00	1.29E+01	1.29E+01	4
127	5.789	13.080	10	5.03E-02	1.86E+00	7.04E-02	5.03E-02	1.86E+00	1.31E+01	1.32E+01	4
128	5.929	13.162	10	8.73E-02	2.83E+00	1.22E-01	8.73E-02	2.83E+00	1.99E+01	2.01E+01	5
129	6.018	13.474	10	1.05E-01	3.39E+00	1.47E-01	1.05E-01	3.39E+00	2.39E+01	2.40E+01	5
130	6.010	13.396	10	1.06E-01	3.36E+00	1.48E-01	1.06E-01	3.36E+00	2.37E+01	2.38E+01	5
131	6.016	13.310	10	1.11E-01	3.47E+00	1.55E-01	1.11E-01	3.47E+00	2.44E+01	2.46E+01	5
132	6.074	13.908	10	1.02E-01	3.71E+00	1.43E-01	1.02E-01	3.71E+00	2.61E+01	2.63E+01	5
133	6.062	13.731	10	1.07E-01	3.69E+00	1.50E-01	1.07E-01	3.69E+00	2.60E+01	2.61E+01	5
134	6.072	13.821	10	1.05E-01	3.78E+00	1.47E-01	1.05E-01	3.78E+00	2.66E+01	2.68E+01	5
166	7.334	13.972	7	4.19E-01	4.86E+01	5.87E-01	4.19E-01	4.86E+01	3.41E+02	3.41E+02	8
167	7.026	14.663	7	3.34E-01	4.26E+01	4.68E-01	3.34E-01	4.26E+01	2.99E+02	2.99E+02	8
168	6.948	14.165	7	2.66E-01	3.29E+01	3.72E-01	2.66E-01	3.29E+01	2.31E+02	2.31E+02	8
169	6.942	14.288	7	2.73E-01	3.36E+01	3.82E-01	2.73E-01	3.36E+01	2.36E+02	2.36E+02	8
170	6.850	14.458	7	2.53E-01	2.93E+01	3.54E-01	2.53E-01	2.93E+01	2.05E+02	2.06E+02	8
171	6.764	14.472	7	2.36E-01	2.48E+01	3.30E-01	2.36E-01	2.48E+01	1.74E+02	1.74E+02	8
172	7.440	14.125	7	4.12E-01	5.60E+01	5.77E-01	4.12E-01	5.60E+01	3.93E+02	3.93E+02	8
173	7.436	14.236	7	4.20E-01	5.85E+01	5.88E-01	4.20E-01	5.85E+01	4.10E+02	4.11E+02	8
174	6.956	14.789	7	3.13E-01	3.89E+01	4.38E-01	3.13E-01	3.89E+01	2.73E+02	2.73E+02	8
175	6.863	14.788	7	2.71E-01	3.20E+01	3.79E-01	2.71E-01	3.20E+01	2.24E+02	2.25E+02	8
176	6.271	15.463	7	4.51E-02	3.01E+00	6.31E-02	4.51E-02	3.01E+00	2.11E+01	2.12E+01	5
177	6.321	15.463	7	5.52E-02	4.12E+00	7.73E-02	5.52E-02	4.12E+00	2.89E+01	2.90E+01	5
178	7.506	12.976	7	3.61E-01	3.61E+01	5.05E-01	3.61E-01	3.61E+01	2.53E+02	2.54E+02	8
179	7.131	13.038	7	2.96E-01	2.91E+01	4.14E-01	2.96E-01	2.91E+01	2.04E+02	2.05E+02	8
180	7.141	12.989	7	2.94E-01	2.89E+01	4.12E-01	2.94E-01	2.89E+01	2.03E+02	2.03E+02	8
181	7.054	12.577	7	2.04E-01	2.33E+01	2.86E-01	2.04E-01	2.33E+01	1.63E+02	1.64E+02	8
182	7.046	12.659	7	2.09E-01	2.38E+01	2.93E-01	2.09E-01	2.38E+01	1.67E+02	1.67E+02	8
183	7.746	13.395	7	3.77E-01	4.44E+01	5.28E-01	3.77E-01	4.44E+01	3.11E+02	3.12E+02	8
184	7.707	13.388	7	3.64E-01	4.44E+01	5.10E-01	3.64E-01	4.44E+01	3.11E+02	3.12E+02	8
185	7.463	12.752	7	3.80E-01	3.27E+01	5.32E-01	3.80E-01	3.27E+01	2.29E+02	2.30E+02	8
186	7.547	12.760	7	3.22E-01	3.36E+01	4.51E-01	3.22E-01	3.36E+01	2.36E+02	2.36E+02	8
187	7.033	13.512	7	2.71E-01	3.07E+01	3.79E-01	2.71E-01	3.07E+01	2.15E+02	2.16E+02	8
188	7.072	13.509	7	2.92E-01	3.21E+01	4.09E-01	2.92E-01	3.21E+01	2.25E+02	2.26E+02	8
189	5.211	12.855	7	1.07E-06	0.00E+00	1.50E-06	1.07E-06	0.00E+00	1.50E-06	3.00E-06	1
190	5.817	12.688	7	6.35E-02	2.13E+00	8.89E-02	6.35E-02	2.13E+00	1.50E+01	1.51E+01	5
191	5.850	12.720	7	7.07E-02	2.29E+00	9.90E-02	7.07E-02	2.29E+00	1.61E+01	1.62E+01	5
192	5.199	13.137	7	1.81E-07	0.00E+00	2.53E-07	1.81E-07	0.00E+00	2.53E-07	5.07E-07	1
193	5.224	13.195	7	1.68E-08	0.00E+00	2.35E-08	1.68E-08	0.00E+00	2.35E-08	4.70E-08	1
194	5.504	12.164	7	1.42E-02	9.11E-01	1.99E-02	1.42E-02	9.11E-01	6.40E+00	6.42E+00	4
195	5.583	12.163	7	2.33E-02	1.18E+00	3.26E-02	2.33E-02	1.18E+00	8.29E+00	8.33E+00	4
200	6.741	13.475	7	1.85E-01	1.99E+01	2.59E-01	1.85E-01	1.99E+01	1.40E+02	1.40E+02	8
201	6.796	13.214	7	1.61E-01	2.05E+01	2.25E-01	1.61E-01	2.05E+01	1.44E+02	1.44E+02	8
202	6.778	13.317	7	1.71E-01	2.04E+01	2.39E-01	1.71E-01	2.04E+01	1.43E+02	1.43E+02	8
203	6.788	13.359	7	1.74E-01	2.09E+01	2.44E-01	1.74E-01	2.09E+01	1.47E+02	1.47E+02	8
204	7.366	14.688	7	4.57E-01	6.59E+01	6.40E-01	4.57E-01	6.59E+01	4.62E+02	4.63E+02	8
205	7.305	14.755	7	4.59E-01	6.38E+01	6.43E-01	4.59E-01	6.38E+01	4.47E+02	4.48E+02	8
206	6.739	13.622	7	1.94E-01	2.04E+01	2.72E-01	1.94E-01	2.04E+01	1.43E+02	1.43E+02	8
207	6.879	13.872	7	2.30E-01	2.72E+01	3.22E-01	2.30E-01	2.72E+01	1.91E+02	1.91E+02	8
208	8.588	15.342	8	1.76E-01	2.39E+01	2.46E-01	1.76E-01	2.39E+01	1.68E+02	1.68E+02	8
209	8.908	13.545	8	1.05E-01	1.14E+01	1.47E-01	1.05E-01	1.14E+01	7.99E+01	8.01E+01	8
210	5.928	14.339	8	4.15E-02	1.85E+00	5.81E-02	4.15E-02	1.85E+00	1.30E+01	1.31E+01	4
211	5.764	13.557	8	3.28E-02	1.48E+00	4.59E-02	3.28E-02	1.48E+00	1.04E+01	1.05E+01	4
212	5.766	13.622	8	3.14E-02	1.44E+00	4.40E-02	3.14E-02	1.44E+00	1.01E+01	1.02E+01	4
213	5.767	13.674	8	3.01E-02	1.41E+00	4.21E-02	3.01E-02	1.41E+00	9.91E+00	9.95E+00	4
214	5.958	13.839	8	7.29E-02	2.63E+00	1.02E-01	7.29E-02	2.63E+00	1.85E+01	1.86E+01	5
215	5.913	13.903	8	5.69E-02	2.19E+00	7.97E-02	5.69E-02	2.19E+00	1.54E+01	1.55E+01	5

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

216	5.912	13.851	8	5.85E-02	2.23E+00	8.19E-02	5.85E-02	2.23E+00	1.57E+01	1.58E+01	5
221	7.179	14.934	8	4.24E-01	5.84E+01	5.94E-01	4.24E-01	5.84E+01	4.09E+02	4.10E+02	8
222	7.741	14.419	8	5.41E-01	6.96E+01	7.57E-01	5.41E-01	6.96E+01	4.88E+02	4.89E+02	8
223	7.988	13.720	8	3.69E-01	4.78E+01	5.17E-01	3.69E-01	4.78E+01	3.35E+02	3.36E+02	8
224	7.958	13.236	8	3.55E-01	3.96E+01	4.97E-01	3.55E-01	3.96E+01	2.78E+02	2.78E+02	8
225	7.429	13.719	8	4.04E-01	4.71E+01	5.66E-01	4.04E-01	4.71E+01	3.30E+02	3.31E+02	8
226	7.252	13.804	8	4.27E-01	4.27E+01	5.98E-01	4.27E-01	4.27E+01	2.99E+02	3.00E+02	8
231	5.991	14.398	10	5.49E-02	2.27E+00	7.69E-02	5.49E-02	2.27E+00	1.60E+01	1.60E+01	5
232	6.000	14.484	10	5.23E-02	2.21E+00	7.32E-02	5.23E-02	2.21E+00	1.55E+01	1.56E+01	5
233	6.059	14.191	10	8.43E-02	3.16E+00	1.18E-01	8.43E-02	3.16E+00	2.22E+01	2.24E+01	5
234	6.048	14.352	10	7.24E-02	2.78E+00	1.01E-01	7.24E-02	2.78E+00	1.96E+01	1.97E+01	5
235	5.928	14.253	10	4.56E-02	1.95E+00	6.38E-02	4.56E-02	1.95E+00	1.37E+01	1.38E+01	4
236	5.995	14.318	10	6.03E-02	2.41E+00	8.44E-02	6.03E-02	2.41E+00	1.70E+01	1.70E+01	5
237	6.729	14.564	10	2.32E-01	2.32E+01	3.25E-01	2.32E-01	2.32E+01	1.63E+02	1.63E+02	8
238	6.663	14.478	10	2.14E-01	1.94E+01	3.00E-01	2.14E-01	1.94E+01	1.36E+02	1.36E+02	8
239	6.637	14.483	10	2.04E-01	1.82E+01	2.86E-01	2.04E-01	1.82E+01	1.28E+02	1.28E+02	8
240	5.917	14.848	10	1.57E-02	1.05E+00	2.20E-02	1.57E-02	1.05E+00	7.37E+00	7.39E+00	4
241	5.911	14.774	10	1.66E-02	1.12E+00	2.32E-02	1.66E-02	1.12E+00	7.86E+00	7.89E+00	4
242	5.917	14.700	10	2.14E-02	1.27E+00	3.00E-02	2.14E-02	1.27E+00	8.92E+00	8.95E+00	4
243	8.013	13.953	10	3.71E-01	5.21E+01	5.19E-01	3.71E-01	5.21E+01	3.65E+02	3.66E+02	8
244	7.946	14.060	10	4.26E-01	5.64E+01	5.96E-01	4.26E-01	5.64E+01	3.95E+02	3.96E+02	8
245	7.718	14.098	10	5.03E-01	6.03E+01	7.04E-01	5.03E-01	6.03E+01	4.23E+02	4.24E+02	8
246	7.515	14.327	10	4.64E-01	6.31E+01	6.50E-01	4.64E-01	6.31E+01	4.42E+02	4.43E+02	8
247	7.581	14.642	10	5.34E-01	7.44E+01	7.48E-01	5.34E-01	7.44E+01	5.22E+02	5.22E+02	8
248	7.672	14.528	10	5.59E-01	7.32E+01	7.83E-01	5.59E-01	7.32E+01	5.13E+02	5.14E+02	8
249	7.873	14.201	10	4.97E-01	6.22E+01	6.96E-01	4.97E-01	6.22E+01	4.36E+02	4.37E+02	8
250	7.478	14.745	10	4.84E-01	7.37E+01	6.78E-01	4.84E-01	7.37E+01	5.17E+02	5.17E+02	8
251	7.017	15.446	10	2.86E-01	5.12E+01	4.00E-01	2.86E-01	5.12E+01	3.59E+02	3.59E+02	8
252	7.155	15.299	10	4.01E-01	6.32E+01	5.61E-01	4.01E-01	6.32E+01	4.43E+02	4.44E+02	8
253	7.408	14.928	10	4.89E-01	7.51E+01	6.85E-01	4.89E-01	7.51E+01	5.26E+02	5.27E+02	8
254	7.311	15.085	10	4.88E-01	7.23E+01	6.83E-01	4.88E-01	7.23E+01	5.07E+02	5.07E+02	8
255	6.893	14.961	10	2.71E-01	3.53E+01	3.79E-01	2.71E-01	3.53E+01	2.47E+02	2.48E+02	8
256	6.712	15.037	10	2.01E-01	2.26E+01	2.81E-01	2.01E-01	2.26E+01	1.58E+02	1.59E+02	8
257	6.799	14.963	10	2.37E-01	2.84E+01	3.32E-01	2.37E-01	2.84E+01	1.99E+02	1.99E+02	8
258	6.915	15.505	10	2.30E-01	4.01E+01	3.22E-01	2.30E-01	4.01E+01	2.81E+02	2.81E+02	8
259	6.679	15.833	10	1.11E-01	1.56E+01	1.55E-01	1.11E-01	1.56E+01	1.09E+02	1.10E+02	8
260	6.524	15.940	10	6.23E-02	6.45E+00	8.72E-02	6.23E-02	6.45E+00	4.52E+01	4.53E+01	6
261	6.241	15.673	10	3.15E-02	1.71E+00	4.41E-02	3.15E-02	1.71E+00	1.20E+01	1.21E+01	4
262	6.476	15.623	10	8.05E-02	7.13E+00	1.13E-01	8.05E-02	7.13E+00	5.00E+01	5.01E+01	7
263	6.334	15.995	10	2.49E-02	1.66E+00	3.49E-02	2.49E-02	1.66E+00	1.17E+01	1.17E+01	4
264	6.044	15.980	10	9.03E-06	0.00E+00	1.26E-05	9.03E-06	0.00E+00	1.26E-05	2.53E-05	1
265	6.660	15.900	10	1.03E-01	1.31E+01	1.44E-01	1.03E-01	1.31E+01	9.18E+01	9.20E+01	8
266	7.396	13.240	10	3.89E-01	3.82E+01	5.45E-01	3.89E-01	3.82E+01	2.68E+02	2.68E+02	8
267	7.530	13.256	10	3.60E-01	4.07E+01	5.04E-01	3.60E-01	4.07E+01	2.85E+02	2.86E+02	8
268	7.463	13.247	10	3.87E-01	3.97E+01	5.42E-01	3.87E-01	3.97E+01	2.78E+02	2.79E+02	8
269	5.451	13.254	10	8.59E-05	3.74E-01	1.20E-04	8.59E-05	3.74E-01	2.62E+00	2.62E+00	2
270	5.514	13.209	10	5.33E-03	6.04E-01	7.46E-03	5.33E-03	6.04E-01	4.24E+00	4.24E+00	3
271	5.566	13.193	10	9.83E-03	7.84E-01	1.38E-02	9.83E-03	7.84E-01	5.50E+00	5.52E+00	3
272	8.925	13.445	10	1.03E-01	1.09E+01	1.44E-01	1.03E-01	1.09E+01	7.64E+01	7.66E+01	8
273	8.034	13.567	10	3.39E-01	4.39E+01	4.75E-01	3.39E-01	4.39E+01	3.08E+02	3.08E+02	8
274	8.003	13.353	10	3.44E-01	4.08E+01	4.82E-01	3.44E-01	4.08E+01	2.86E+02	2.87E+02	8
275	7.943	13.085	10	3.45E-01	3.75E+01	4.83E-01	3.45E-01	3.75E+01	2.63E+02	2.63E+02	8
276	7.968	12.917	10	3.23E-01	3.47E+01	4.52E-01	3.23E-01	3.47E+01	2.43E+02	2.44E+02	8
277	7.863	12.777	10	3.03E-01	3.41E+01	4.24E-01	3.03E-01	3.41E+01	2.39E+02	2.40E+02	8
278	7.878	12.691	10	2.86E-01	3.28E+01	4.00E-01	2.86E-01	3.28E+01	2.30E+02	2.30E+02	8
279	7.995	13.442	10	3.50E-01	4.24E+01	4.90E-01	3.50E-01	4.24E+01	2.97E+02	2.98E+02	8
280	7.857	12.530	10	2.55E-01	3.11E+01	3.57E-01	2.55E-01	3.11E+01	2.18E+02	2.18E+02	8
281	7.824	12.394	10	2.36E-01	2.96E+01	3.30E-01	2.36E-01	2.96E+01	2.08E+02	2.08E+02	8
282	7.724	12.188	10	2.35E-01	2.76E+01	3.29E-01	2.35E-01	2.76E+01	1.94E+02	1.94E+02	8
283	7.648	12.035	10	2.23E-01	2.61E+01	3.12E-01	2.23E-01	2.61E+01	1.83E+02	1.83E+02	8
284	7.275	11.825	10	2.12E-01	2.15E+01	2.97E-01	2.12E-01	2.15E+01	1.51E+02	1.51E+02	8
285	7.016	11.743	10	1.41E-01	1.74E+01	1.97E-01	1.41E-01	1.74E+01	1.22E+02	1.22E+02	8
286	7.480	11.946	10	3.08E-01	2.44E+01	4.31E-01	3.08E-01	2.44E+01	1.71E+02	1.72E+02	8
287	7.125	11.776	10	1.57E-01	1.91E+01	2.20E-01	1.57E-01	1.91E+01	1.34E+02	1.34E+02	8
288	7.478	13.592	10	4.05E-01	4.58E+01	5.67E-01	4.05E-01	4.58E+01	3.21E+02	3.22E+02	8
289	7.295	13.718	10	4.14E-01	4.28E+01	5.80E-01	4.14E-01	4.28E+01	3.00E+02	3.01E+02	8
290	7.130	13.786	10	3.42E-01	3.74E+01	4.79E-01	3.42E-01	3.74E+01	2.62E+02	2.63E+02	8
291	6.927	13.730	10	2.37E-01	2.83E+01	3.32E-01	2.37E-01	2.83E+01	1.98E+02	1.99E+02	8
292	7.057	13.229	10	2.81E-01	2.89E+01	3.93E-01	2.81E-01	2.89E+01	2.03E+02	2.03E+02	8
293	7.250	13.218	10	3.79E-01	3.45E+01	5.31E-01	3.79E-01	3.45E+01	2.42E+02	2.43E+02	8
294	7.092	13.854	10	3.17E-01	3.66E+01	4.44E-01	3.17E-01	3.66E+01	2.57E+02	2.57E+02	8
295	5.413	12.882	10	2.41E-03	4.27E-01	3.37E-03	2.41E-03	4.27E-01	2.99E+00	3.00E+00	2
296	5.537	12.816	10	1.17E-02	8.50E-01	1.64E-02	1.17E-02	8.50E-01	5.97E+00	5.98E+00	3
297	5.496	12.799	10	8.06E-03	7.11E-01	1.13E-02	8.06E-03	7.11E-01	4.99E+00	5.00E+00	3

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

298	5.561	12.909	10	1.28E-02	8.96E-01	1.79E-02	1.28E-02	8.96E-01	6.29E+00	6.31E+00	4
299	5.615	12.839	10	1.87E-02	1.12E+00	2.62E-02	1.87E-02	1.12E+00	7.87E+00	7.89E+00	4
300	5.608	12.984	10	1.61E-02	1.02E+00	2.25E-02	1.61E-02	1.02E+00	7.16E+00	7.19E+00	4
302	6.396	11.688	10	1.70E-01	8.03E+00	2.38E-01	1.70E-01	8.03E+00	5.64E+01	5.67E+01	7
303	6.276	11.651	10	1.58E-01	6.52E+00	2.21E-01	1.58E-01	6.52E+00	4.59E+01	4.61E+01	6
304	5.755	11.682	10	6.37E-02	2.04E+00	8.92E-02	6.37E-02	2.04E+00	1.44E+01	1.45E+01	4
305	5.635	11.734	10	3.40E-02	1.40E+00	4.76E-02	3.40E-02	1.40E+00	9.85E+00	9.90E+00	4
306	5.353	11.802	10	5.21E-03	5.72E-01	7.29E-03	5.21E-03	5.72E-01	4.01E+00	4.02E+00	3
307	5.207	11.849	10	9.63E-04	2.51E-01	1.35E-03	9.63E-04	2.51E-01	1.76E+00	1.76E+00	2
309	5.181	11.974	10	6.22E-04	1.98E-01	8.71E-04	6.22E-04	1.98E-01	1.39E+00	1.39E+00	2
325	5.702	14.442	10	5.06E-03	4.32E-01	7.08E-03	5.06E-03	4.32E-01	3.03E+00	3.04E+00	3
326	5.689	14.515	10	3.31E-03	2.84E-01	4.63E-03	3.31E-03	2.84E-01	1.99E+00	2.00E+00	2
327	5.512	14.539	10	2.19E-04	2.33E-02	3.07E-04	2.19E-04	2.33E-02	1.63E-01	1.64E-01	1
328	5.636	14.371	10	1.08E-03	2.56E-01	1.51E-03	1.08E-03	2.56E-01	1.79E+00	1.80E+00	2
329	5.419	13.723	10	2.54E-06	6.57E-02	3.56E-06	2.54E-06	6.57E-02	4.60E-01	4.60E-01	2
330	5.408	13.795	10	1.91E-06	3.99E-03	2.67E-06	1.91E-06	3.99E-03	2.79E-02	2.79E-02	1
331	5.493	13.630	10	1.92E-03	3.14E-01	2.69E-03	1.92E-03	3.14E-01	2.20E+00	2.20E+00	2
332	5.361	13.699	10	1.78E-06	5.66E-02	2.49E-06	1.78E-06	5.66E-02	3.96E-01	3.96E-01	2
333	5.363	13.843	10	1.14E-06	0.00E+00	1.60E-06	1.14E-06	0.00E+00	1.60E-06	3.19E-06	1
334	5.691	13.943	10	1.00E-02	8.27E-01	1.40E-02	1.00E-02	8.27E-01	5.80E+00	5.82E+00	3
335	5.690	14.073	10	7.88E-03	7.24E-01	1.10E-02	7.88E-03	7.24E-01	5.08E+00	5.09E+00	3
336	5.654	14.156	10	2.27E-03	4.95E-01	3.18E-03	2.27E-03	4.95E-01	3.47E+00	3.47E+00	3
337	5.627	13.811	10	4.97E-03	6.38E-01	6.96E-03	4.97E-03	6.38E-01	4.47E+00	4.48E+00	3
338	5.888	12.262	10	8.39E-02	2.73E+00	1.17E-01	8.39E-02	2.73E+00	1.92E+01	1.93E+01	5
339	5.993	12.248	10	9.84E-02	3.72E+00	1.38E-01	9.84E-02	3.72E+00	2.62E+01	2.63E+01	5
340	5.752	12.293	10	5.44E-02	1.88E+00	7.62E-02	5.44E-02	1.88E+00	1.32E+01	1.33E+01	4
341	5.706	12.340	10	4.26E-02	1.63E+00	5.96E-02	4.26E-02	1.63E+00	1.15E+01	1.15E+01	4
342	6.849	12.996	10	1.42E-01	2.09E+01	1.99E-01	1.42E-01	2.09E+01	1.46E+02	1.47E+02	8
343	6.900	12.944	10	1.69E-01	2.20E+01	2.37E-01	1.69E-01	2.20E+01	1.54E+02	1.54E+02	8
344	6.866	12.886	10	1.53E-01	2.07E+01	2.14E-01	1.53E-01	2.07E+01	1.45E+02	1.45E+02	8
345	6.785	13.015	10	1.54E-01	1.92E+01	2.16E-01	1.54E-01	1.92E+01	1.35E+02	1.35E+02	8
346	6.814	13.529	10	1.86E-01	2.27E+01	2.60E-01	1.86E-01	2.27E+01	1.59E+02	1.59E+02	8
347	6.740	13.527	10	1.88E-01	2.01E+01	2.63E-01	1.88E-01	2.01E+01	1.41E+02	1.41E+02	8
348	6.048	14.515	10	6.24E-02	2.54E+00	8.74E-02	6.24E-02	2.54E+00	1.79E+01	1.80E+01	5
349	6.052	12.911	10	1.18E-01	4.11E+00	1.65E-01	1.18E-01	4.11E+00	2.89E+01	2.91E+01	5
350	6.039	13.007	10	1.17E-01	3.93E+00	1.64E-01	1.17E-01	3.93E+00	2.77E+01	2.78E+01	5
351	5.955	12.889	10	9.36E-02	3.22E+00	1.31E-01	9.36E-02	3.22E+00	2.27E+01	2.28E+01	5
352	5.960	12.980	10	9.55E-02	3.23E+00	1.34E-01	9.55E-02	3.23E+00	2.27E+01	2.29E+01	5
353	5.884	13.058	10	7.43E-02	2.50E+00	1.04E-01	7.43E-02	2.50E+00	1.76E+01	1.77E+01	5
354	5.911	13.172	10	8.16E-02	2.66E+00	1.14E-01	8.16E-02	2.66E+00	1.87E+01	1.88E+01	5
355	5.823	13.093	10	5.78E-02	2.03E+00	8.09E-02	5.78E-02	2.03E+00	1.43E+01	1.44E+01	4
356	5.820	13.172	10	5.57E-02	1.98E+00	7.80E-02	5.57E-02	1.98E+00	1.39E+01	1.40E+01	4
357	6.039	13.482	10	1.11E-01	3.56E+00	1.55E-01	1.11E-01	3.56E+00	2.51E+01	2.52E+01	5
358	6.038	13.406	10	1.14E-01	3.60E+00	1.60E-01	1.14E-01	3.60E+00	2.54E+01	2.55E+01	5
359	6.041	13.323	10	1.18E-01	3.68E+00	1.65E-01	1.18E-01	3.68E+00	2.59E+01	2.61E+01	5
360	6.145	13.753	10	1.22E-01	4.96E+00	1.71E-01	1.22E-01	4.96E+00	3.49E+01	3.51E+01	6
361	6.165	13.823	10	1.22E-01	5.20E+00	1.71E-01	1.22E-01	5.20E+00	3.66E+01	3.67E+01	6
362	6.119	13.900	10	1.10E-01	4.40E+00	1.54E-01	1.10E-01	4.40E+00	3.10E+01	3.11E+01	6
363	8.542	15.410	10	1.97E-01	2.82E+01	2.76E-01	1.97E-01	2.82E+01	1.98E+02	1.98E+02	8
396	7.061	14.186	7	3.03E-01	3.91E+01	4.24E-01	3.03E-01	3.91E+01	2.74E+02	2.75E+02	8
397	6.978	14.291	7	2.84E-01	3.57E+01	3.98E-01	2.84E-01	3.57E+01	2.50E+02	2.51E+02	8
398	6.862	14.468	7	2.58E-01	3.01E+01	3.61E-01	2.58E-01	3.01E+01	2.11E+02	2.11E+02	8
399	6.809	14.467	7	2.45E-01	2.72E+01	3.43E-01	2.45E-01	2.72E+01	1.91E+02	1.91E+02	8
400	7.445	14.117	7	4.11E-01	5.60E+01	5.75E-01	4.11E-01	5.60E+01	3.93E+02	3.93E+02	8
401	7.445	14.229	7	4.19E-01	5.87E+01	5.87E-01	4.19E-01	5.87E+01	4.11E+02	4.12E+02	8
402	6.871	14.784	7	2.74E-01	3.26E+01	3.84E-01	2.74E-01	3.26E+01	2.29E+02	2.29E+02	8
403	6.970	14.787	7	3.19E-01	3.99E+01	4.47E-01	3.19E-01	3.99E+01	2.80E+02	2.80E+02	8
404	6.339	15.451	7	5.90E-02	4.58E+00	8.26E-02	5.90E-02	4.58E+00	3.21E+01	3.22E+01	6
405	6.245	15.441	7	4.09E-02	2.58E+00	5.73E-02	4.09E-02	2.58E+00	1.81E+01	1.82E+01	5
406	7.153	12.978	7	2.98E-01	2.91E+01	4.17E-01	2.98E-01	2.91E+01	2.04E+02	2.05E+02	8
407	7.127	13.079	7	3.00E-01	2.94E+01	4.20E-01	3.00E-01	2.94E+01	2.06E+02	2.07E+02	8
408	7.076	12.580	7	2.15E-01	2.38E+01	3.01E-01	2.15E-01	2.38E+01	1.67E+02	1.67E+02	8
409	7.073	12.680	7	2.24E-01	2.46E+01	3.14E-01	2.24E-01	2.46E+01	1.73E+02	1.73E+02	8
410	7.742	13.383	7	3.73E-01	4.42E+01	5.22E-01	3.73E-01	4.42E+01	3.10E+02	3.10E+02	8
411	7.804	13.386	7	3.94E-01	4.41E+01	5.52E-01	3.94E-01	4.41E+01	3.09E+02	3.10E+02	8
412	7.534	12.774	7	3.31E-01	3.36E+01	4.63E-01	3.31E-01	3.36E+01	2.36E+02	2.36E+02	8
413	7.448	12.779	7	3.88E-01	3.29E+01	5.43E-01	3.88E-01	3.29E+01	2.31E+02	2.31E+02	8
414	7.030	13.452	7	2.66E-01	3.00E+01	3.72E-01	2.66E-01	3.00E+01	2.10E+02	2.11E+02	8
415	7.077	13.448	7	2.91E-01	3.16E+01	4.07E-01	2.91E-01	3.16E+01	2.22E+02	2.22E+02	8
416	5.798	12.686	7	5.91E-02	2.04E+00	8.27E-02	5.91E-02	2.04E+00	1.44E+01	1.44E+01	4
417	5.881	12.714	7	7.72E-02	2.58E+00	1.08E-01	7.72E-02	2.58E+00	1.82E+01	1.83E+01	5
418	5.228	13.115	7	2.92E-07	0.00E+00	4.09E-07	2.92E-07	0.00E+00	4.09E-07	8.18E-07	1
419	5.264	13.099	7	6.64E-05	3.10E-02	9.30E-05	6.64E-05	3.10E-02	2.17E-01	2.17E-01	1
420	5.601	12.207	7	2.50E-02	1.23E+00	3.50E-02	2.50E-02	1.23E+00	8.65E+00	8.68E+00	4

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

421	5.517	12.227	7	1.54E-02	9.40E-01	2.16E-02	1.54E-02	9.40E-01	6.60E+00	6.62E+00	4
426	6.795	13.441	7	1.80E-01	2.16E+01	2.52E-01	1.80E-01	2.16E+01	1.51E+02	1.52E+02	8
427	6.756	13.385	7	1.78E-01	2.00E+01	2.49E-01	1.78E-01	2.00E+01	1.40E+02	1.40E+02	8
428	6.744	13.296	7	1.73E-01	1.92E+01	2.42E-01	1.73E-01	1.92E+01	1.35E+02	1.35E+02	8
429	6.741	13.225	7	1.69E-01	1.88E+01	2.37E-01	1.69E-01	1.88E+01	1.32E+02	1.32E+02	8
430	7.285	14.750	7	4.58E-01	6.24E+01	6.41E-01	4.58E-01	6.24E+01	4.37E+02	4.38E+02	8
431	7.386	14.670	7	4.56E-01	6.67E+01	6.38E-01	4.56E-01	6.67E+01	4.68E+02	4.68E+02	8
432	6.970	13.918	7	2.63E-01	3.18E+01	3.68E-01	2.63E-01	3.18E+01	2.23E+02	2.23E+02	8
433	6.824	14.074	7	2.31E-01	2.60E+01	3.23E-01	2.31E-01	2.60E+01	1.82E+02	1.83E+02	8
436	7.339	13.972	8	4.18E-01	4.88E+01	5.85E-01	4.18E-01	4.88E+01	3.42E+02	3.43E+02	8
437	7.031	14.651	8	3.35E-01	4.28E+01	4.69E-01	3.35E-01	4.28E+01	3.00E+02	3.01E+02	8
438	7.510	12.983	8	3.59E-01	3.63E+01	5.03E-01	3.59E-01	3.63E+01	2.55E+02	2.55E+02	8
439	5.211	12.851	8	1.09E-06	0.00E+00	1.53E-06	1.09E-06	0.00E+00	1.53E-06	3.05E-06	1
440	7.567	16.192	8	5.89E-01	1.16E+02	8.25E-01	5.89E-01	1.16E+02	8.13E+02	8.14E+02	8
441	8.628	12.179	8	1.98E-01	1.51E+01	2.77E-01	1.98E-01	1.51E+01	1.06E+02	1.06E+02	8
442	5.998	14.225	8	6.64E-02	2.56E+00	9.30E-02	6.64E-02	2.56E+00	1.80E+01	1.81E+01	5
443	5.724	13.641	8	2.28E-02	1.21E+00	3.19E-02	2.28E-02	1.21E+00	8.50E+00	8.53E+00	4
444	5.772	13.525	8	3.52E-02	1.54E+00	4.93E-02	3.52E-02	1.54E+00	1.08E+01	1.09E+01	4
445	5.724	13.585	8	2.42E-02	1.25E+00	3.39E-02	2.42E-02	1.25E+00	8.78E+00	8.82E+00	4
446	5.932	13.871	8	6.38E-02	2.38E+00	8.93E-02	6.38E-02	2.38E+00	1.67E+01	1.68E+01	5
447	5.920	13.941	8	5.77E-02	2.21E+00	8.08E-02	5.77E-02	2.21E+00	1.56E+01	1.56E+01	5
448	5.927	13.817	8	6.43E-02	2.39E+00	9.00E-02	6.43E-02	2.39E+00	1.68E+01	1.69E+01	5

Case 2: Protected 2 rounds at aimpoint (5.70, 13.55)

40	5.550	13.245	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-01	5.08E+00	5.08E+00	3
41	5.474	13.201	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E+01	2.44E+02	2.44E+02	8
42	5.507	13.288	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-01	4.47E+00	4.47E+00	3
68	5.483	12.959	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E+00	1.64E+01	1.64E+01	5
69	5.563	12.908	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-01	7.56E-01	7.56E-01	2
72	5.451	12.890	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-01	5.31E+00	5.31E+00	3
121	6.032	12.989	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E+00	2.48E+01	2.48E+01	5
122	5.929	12.964	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E+00	1.44E+01	1.44E+01	4
123	6.033	12.883	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E+01	3.23E+02	3.23E+02	8
124	5.934	12.874	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E+01	1.75E+02	1.75E+02	8
189	5.211	12.855	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03	1.19E-02	1.19E-02	1
190	5.817	12.688	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-01	6.60E+00	6.60E+00	4
191	5.850	12.720	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E+00	1.63E+01	1.63E+01	5
193	5.224	13.195	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-01	4.15E+00	4.15E+00	3
269	5.451	13.254	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E+01	4.61E+02	4.61E+02	8
270	5.514	13.209	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E+00	2.37E+01	2.37E+01	5
271	5.566	13.193	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E+00	1.20E+01	1.20E+01	4
295	5.413	12.882	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-01	6.67E+00	6.67E+00	4
298	5.561	12.909	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-01	8.12E-01	8.12E-01	2
349	6.052	12.911	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E+01	1.55E+02	1.55E+02	8
350	6.039	13.007	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E+00	1.59E+01	1.59E+01	5
351	5.955	12.889	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E+01	2.33E+02	2.33E+02	8
352	5.960	12.980	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E+00	2.42E+01	2.42E+01	5
417	5.881	12.714	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E+00	2.73E+01	2.73E+01	5
418	5.228	13.115	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+00	8.40E+00	8.40E+00	4
419	5.264	13.099	7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E+00	1.93E+01	1.93E+01	5
439	5.211	12.851	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04	2.38E-03	2.38E-03	1

VX 500kg TBM
Heavy Attack
Height of Release: 800m

				Inhalation			Percutaneous			Total		
Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Equivalent Exposure (mg-min/m³)	Injury Severity Category	
Case 1: Unprotected				4 rounds at aimpoint (6.25, 17.95)								
1	6.093	14.476	10	1.38E+00	4.90E+01	1.93E+00	1.38E+00	4.90E+01	3.45E+02	3.47E+02	8	
2	6.092	14.323	10	1.48E+00	5.29E+01	2.07E+00	1.48E+00	5.29E+01	3.72E+02	3.74E+02	8	
3	6.056	14.272	10	1.57E+00	7.89E+01	2.20E+00	1.57E+00	7.89E+01	5.54E+02	5.57E+02	8	
4	5.928	14.340	10	1.47E+00	1.20E+02	2.06E+00	1.47E+00	1.20E+02	8.42E+02	8.44E+02	8	
5	5.996	14.233	10	1.56E+00	1.15E+02	2.18E+00	1.56E+00	1.15E+02	8.07E+02	8.09E+02	8	
6	5.940	14.453	10	1.42E+00	1.27E+02	1.99E+00	1.42E+00	1.27E+02	8.91E+02	8.93E+02	8	
7	6.585	14.474	10	2.69E+00	2.15E+02	3.77E+00	2.69E+00	2.15E+02	1.51E+03	1.51E+03	8	
8	6.596	14.509	10	2.55E+00	2.04E+02	3.57E+00	2.55E+00	2.04E+02	1.43E+03	1.44E+03	8	
9	6.650	14.552	10	2.04E+00	1.20E+02	2.86E+00	2.04E+00	1.20E+02	8.43E+02	8.46E+02	8	
10	5.849	14.797	10	1.16E+00	6.56E+01	1.62E+00	1.16E+00	6.56E+01	4.61E+02	4.62E+02	8	
11	5.840	14.745	10	1.15E+00	6.01E+01	1.61E+00	1.15E+00	6.01E+01	4.22E+02	4.24E+02	8	
12	5.853	14.870	10	1.11E+00	6.73E+01	1.55E+00	1.11E+00	6.73E+01	4.73E+02	4.74E+02	8	
23	6.977	15.551	10	8.17E-05	0.00E+00	1.14E-04	8.17E-05	0.00E+00	1.14E-04	2.29E-04	1	

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

26	6.794	15.032	10	4.02E-01	9.99E-01	5.63E-01	4.02E-01	9.99E-01	7.56E+00	8.12E+00	4
27	6.641	15.084	10	1.41E+00	1.07E+02	1.97E+00	1.41E+00	1.07E+02	7.51E+02	7.53E+02	8
28	6.960	14.900	10	2.55E-04	0.00E+00	3.57E-04	2.55E-04	0.00E+00	3.57E-04	7.14E-04	1
30	6.729	15.784	10	2.91E-01	8.37E-01	4.07E-01	2.91E-01	8.37E-01	6.27E+00	6.67E+00	4
31	6.590	15.868	10	5.87E-01	1.31E+02	8.22E-01	5.87E-01	1.31E+02	9.18E+02	9.19E+02	8
32	6.409	15.662	10	1.06E+00	8.34E+01	1.48E+00	1.06E+00	8.34E+01	5.85E+02	5.87E+02	8
33	6.293	15.680	10	3.43E-01	3.72E+01	4.80E-01	3.43E-01	3.72E+01	2.61E+02	2.61E+02	8
34	6.177	16.004	10	1.50E-01	0.00E+00	2.10E-01	1.50E-01	0.00E+00	2.10E-01	4.20E-01	2
35	5.984	15.987	10	3.25E-01	1.17E+02	4.55E-01	3.25E-01	1.17E+02	8.19E+02	8.20E+02	8
36	6.098	15.997	10	2.70E-01	2.15E+00	3.78E-01	2.70E-01	2.15E+00	1.54E+01	1.58E+01	5
40	5.550	13.245	10	8.45E-02	6.58E-01	1.18E-01	8.45E-02	6.58E-01	4.72E+00	4.84E+00	3
41	5.474	13.201	10	2.12E-02	0.00E+00	2.97E-02	2.12E-02	0.00E+00	2.97E-02	5.94E-02	1
42	5.507	13.288	10	4.62E-02	8.10E-02	6.47E-02	4.62E-02	8.10E-02	6.32E-01	6.96E-01	2
56	7.360	11.854	10	6.14E-06	0.00E+00	8.60E-06	6.14E-06	0.00E+00	8.60E-06	1.72E-05	1
57	7.025	11.693	10	1.28E-01	2.23E+00	1.79E-01	1.28E-01	2.23E+00	1.58E+01	1.60E+01	5
58	6.946	11.700	10	3.70E-01	7.01E+00	5.18E-01	3.70E-01	7.01E+00	4.96E+01	5.01E+01	7
62	7.197	13.780	10	1.31E-05	0.00E+00	1.83E-05	1.31E-05	0.00E+00	1.83E-05	3.67E-05	1
63	7.038	13.813	10	8.10E-03	0.00E+00	1.13E-02	8.10E-03	0.00E+00	1.13E-02	2.27E-02	1
64	6.971	13.252	10	1.04E-01	4.80E-01	1.46E-01	1.04E-01	4.80E-01	3.51E+00	3.65E+00	3
65	7.147	13.222	10	4.77E-05	0.00E+00	6.68E-05	4.77E-05	0.00E+00	6.68E-05	1.34E-04	1
66	6.985	13.799	10	4.47E-02	0.00E+00	6.26E-02	4.47E-02	0.00E+00	6.26E-02	1.25E-01	1
67	5.560	12.798	10	1.44E-01	2.18E+00	2.02E-01	1.44E-01	2.18E+00	1.55E+01	1.57E+01	5
68	5.483	12.959	10	3.74E-02	8.35E-02	5.24E-02	3.74E-02	8.35E-02	6.37E-01	6.89E-01	2
69	5.563	12.908	10	1.34E-01	2.22E+00	1.88E-01	1.34E-01	2.22E+00	1.57E+01	1.59E+01	5
70	5.463	12.826	10	1.67E-02	9.39E-02	2.34E-02	1.67E-02	9.39E-02	6.81E-01	7.04E-01	2
71	5.648	12.900	10	2.37E-01	9.30E+00	3.32E-01	2.37E-01	9.30E+00	6.54E+01	6.58E+01	7
72	5.451	12.890	10	1.29E-03	4.86E-03	1.81E-03	1.29E-03	4.86E-03	3.58E-02	3.76E-02	1
73	5.605	10.601	10	4.23E-01	1.13E+01	5.92E-01	4.23E-01	1.13E+01	7.97E+01	8.03E+01	8
74	6.419	11.658	10	4.73E+00	1.80E+02	6.62E+00	4.73E+00	1.80E+02	1.27E+03	1.27E+03	8
75	6.278	11.645	10	3.31E+00	1.25E+02	4.63E+00	3.31E+00	1.25E+02	8.80E+02	8.84E+02	8
76	5.720	11.676	10	8.21E-01	2.76E+01	1.15E+00	8.21E-01	2.76E+01	1.94E+02	1.95E+02	8
77	5.601	11.699	10	3.26E-01	8.95E+00	4.56E-01	3.26E-01	8.95E+00	6.31E+01	6.36E+01	7
78	5.331	11.805	10	5.68E-03	0.00E+00	7.95E-03	5.68E-03	0.00E+00	7.95E-03	1.59E-02	1
79	5.184	11.887	10	2.64E-06	0.00E+00	3.70E-06	2.64E-06	0.00E+00	3.70E-06	7.39E-06	1
80	6.177	11.646	10	2.63E+00	8.81E+01	3.68E+00	2.63E+00	8.81E+01	6.20E+02	6.24E+02	8
81	5.121	11.999	10	1.06E-06	0.00E+00	1.48E-06	1.06E-06	0.00E+00	1.48E-06	2.97E-06	1
95	5.601	15.674	10	1.18E-04	0.00E+00	1.65E-04	1.18E-04	0.00E+00	1.65E-04	3.30E-04	1
96	5.747	15.847	10	1.73E-01	0.00E+00	2.42E-01	1.73E-01	0.00E+00	2.42E-01	4.84E-01	2
97	5.610	14.388	10	2.08E-02	1.86E-01	2.91E-02	2.08E-02	1.86E-01	1.33E+00	1.36E+00	2
98	5.554	14.447	10	1.14E-02	0.00E+00	1.60E-02	1.14E-02	0.00E+00	1.60E-02	3.19E-02	1
99	5.616	14.500	10	1.50E-02	1.77E-01	2.10E-02	1.50E-02	1.77E-01	1.26E+00	1.28E+00	2
100	5.667	14.564	10	1.23E-01	1.31E+00	1.72E-01	1.23E-01	1.31E+00	9.34E+00	9.51E+00	4
101	5.392	13.905	10	1.51E-05	0.00E+00	2.11E-05	1.51E-05	0.00E+00	2.11E-05	4.23E-05	1
102	5.474	13.777	10	1.02E-02	0.00E+00	1.43E-02	1.02E-02	0.00E+00	1.43E-02	2.86E-02	1
103	5.406	13.666	10	2.66E-05	0.00E+00	3.72E-05	2.66E-05	0.00E+00	3.72E-05	7.45E-05	1
104	5.461	13.842	10	4.10E-03	0.00E+00	5.74E-03	4.10E-03	0.00E+00	5.74E-03	1.15E-02	1
105	5.476	13.706	10	1.25E-02	0.00E+00	1.75E-02	1.25E-02	0.00E+00	1.75E-02	3.50E-02	1
106	5.642	13.947	10	5.52E-02	2.45E+00	7.73E-02	5.52E-02	2.45E+00	1.72E+01	1.73E+01	5
107	5.653	13.814	10	1.02E-01	3.95E+00	1.43E-01	1.02E-01	3.95E+00	2.78E+01	2.79E+01	5
108	5.627	14.130	10	3.92E-02	1.08E+00	5.49E-02	3.92E-02	1.08E+00	7.61E+00	7.67E+00	4
109	5.702	14.036	10	4.43E-01	8.51E+00	6.20E-01	4.43E-01	8.51E+00	6.02E+01	6.08E+01	7
110	5.702	12.379	10	6.81E-01	2.24E+01	9.53E-01	6.81E-01	2.24E+01	1.58E+02	1.59E+02	8
111	5.784	12.296	10	1.20E+00	4.31E+01	1.68E+00	1.20E+00	4.31E+01	3.03E+02	3.05E+02	8
112	5.875	12.255	10	1.64E+00	6.58E+01	2.30E+00	1.64E+00	6.58E+01	4.63E+02	4.65E+02	8
113	5.966	12.148	10	1.79E+00	7.47E+01	2.51E+00	1.79E+00	7.47E+01	5.25E+02	5.28E+02	8
114	6.916	12.806	10	2.65E-01	4.80E+00	3.71E-01	2.65E-01	4.80E+00	3.40E+01	3.43E+01	6
115	6.830	12.828	10	6.64E-01	2.15E+01	9.30E-01	6.64E-01	2.15E+01	1.51E+02	1.52E+02	8
116	6.756	12.888	10	1.67E+00	5.43E+01	2.34E+00	1.67E+00	5.43E+01	3.82E+02	3.85E+02	8
117	6.725	12.972	10	2.07E+00	7.59E+01	2.90E+00	2.07E+00	7.59E+01	5.34E+02	5.37E+02	8
118	6.694	13.408	10	2.34E+00	9.54E+01	3.28E+00	2.34E+00	9.54E+01	6.71E+02	6.74E+02	8
119	6.704	13.497	10	2.16E+00	8.43E+01	3.02E+00	2.16E+00	8.43E+01	5.93E+02	5.96E+02	8
120	6.033	14.438	10	1.50E+00	9.44E+01	2.10E+00	1.50E+00	9.44E+01	6.63E+02	6.65E+02	8
121	6.032	12.989	10	1.85E+00	8.84E+01	2.59E+00	1.85E+00	8.84E+01	6.21E+02	6.24E+02	8
122	5.929	12.964	10	1.73E+00	9.67E+01	2.42E+00	1.73E+00	9.67E+01	6.79E+02	6.82E+02	8
123	6.033	12.883	10	1.86E+00	8.61E+01	2.60E+00	1.86E+00	8.61E+01	6.05E+02	6.08E+02	8
124	5.934	12.874	10	1.74E+00	9.33E+01	2.44E+00	1.74E+00	9.33E+01	6.56E+02	6.58E+02	8
125	5.888	13.090	10	1.69E+00	8.59E+01	2.37E+00	1.69E+00	8.59E+01	6.04E+02	6.06E+02	8
126	5.793	13.170	10	1.23E+00	4.71E+01	1.72E+00	1.23E+00	4.71E+01	3.31E+02	3.33E+02	8
127	5.789	13.080	10	1.21E+00	4.72E+01	1.69E+00	1.21E+00	4.72E+01	3.32E+02	3.34E+02	8
128	5.929	13.162	10	1.73E+00	9.41E+01	2.42E+00	1.73E+00	9.41E+01	6.61E+02	6.64E+02	8
129	6.018	13.474	10	1.77E+00	9.27E+01	2.48E+00	1.77E+00	9.27E+01	6.51E+02	6.54E+02	8
130	6.010	13.396	10	1.78E+00	9.45E+01	2.49E+00	1.78E+00	9.45E+01	6.64E+02	6.66E+02	8
131	6.016	13.310	10	1.79E+00	9.14E+01	2.51E+00	1.79E+00	9.14E+01	6.42E+02	6.45E+02	8
132	6.074	13.908	10	1.72E+00	6.97E+01	2.41E+00	1.72E+00	6.97E+01	4.90E+02	4.93E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

133	6.062	13.731	10	1.76E+00	7.67E+01	2.46E+00	1.76E+00	7.67E+01	5.39E+02	5.42E+02	8
134	6.072	13.821	10	1.74E+00	7.13E+01	2.44E+00	1.74E+00	7.13E+01	5.02E+02	5.04E+02	8
167	7.026	14.663	7	1.42E-03	0.00E+00	1.99E-03	1.42E-03	0.00E+00	1.99E-03	3.98E-03	1
168	6.948	14.165	7	3.85E-02	0.00E+00	5.39E-02	3.85E-02	0.00E+00	5.39E-02	1.08E-01	1
169	6.942	14.288	7	3.23E-02	0.00E+00	4.52E-02	3.23E-02	0.00E+00	4.52E-02	9.04E-02	1
170	6.850	14.458	7	3.80E-02	6.14E-01	5.32E-02	3.80E-02	6.14E-01	4.35E+00	4.40E+00	3
171	6.764	14.472	7	9.30E-01	1.52E+01	1.30E+00	9.30E-01	1.52E+01	1.08E+02	1.09E+02	8
174	6.956	14.789	7	2.94E-04	0.00E+00	4.12E-04	2.94E-04	0.00E+00	4.12E-04	8.23E-04	1
175	6.863	14.788	7	5.84E-04	0.00E+00	8.18E-04	5.84E-04	0.00E+00	8.18E-04	1.64E-03	1
176	6.271	15.463	7	3.25E-01	3.24E+01	4.55E-01	3.25E-01	3.24E+01	2.27E+02	2.28E+02	8
177	6.321	15.463	7	7.08E-01	1.02E+02	9.91E-01	7.08E-01	1.02E+02	7.15E+02	7.16E+02	8
179	7.131	13.038	7	6.69E-05	0.00E+00	9.37E-05	6.69E-05	0.00E+00	9.37E-05	1.87E-04	1
180	7.141	12.989	7	6.47E-05	0.00E+00	9.06E-05	6.47E-05	0.00E+00	9.06E-05	1.81E-04	1
181	7.054	12.577	7	1.68E-04	0.00E+00	2.35E-04	1.68E-04	0.00E+00	2.35E-04	4.70E-04	1
182	7.046	12.659	7	9.00E-03	6.20E-02	1.26E-02	9.00E-03	6.20E-02	4.47E-01	4.59E-01	2
187	7.033	13.512	7	1.73E-02	0.00E+00	2.42E-02	1.73E-02	0.00E+00	2.42E-02	4.84E-02	1
188	7.072	13.509	7	6.28E-05	0.00E+00	8.79E-05	6.28E-05	0.00E+00	8.79E-05	1.76E-04	1
190	5.817	12.688	7	1.41E+00	5.47E+01	1.97E+00	1.41E+00	5.47E+01	3.85E+02	3.87E+02	8
191	5.850	12.720	7	1.63E+00	6.69E+01	2.28E+00	1.63E+00	6.69E+01	4.71E+02	4.73E+02	8
194	5.504	12.164	7	1.06E-01	1.60E+00	1.48E-01	1.06E-01	1.60E+00	1.13E+01	1.15E+01	4
195	5.583	12.163	7	2.54E-01	5.74E+00	3.56E-01	2.54E-01	5.74E+00	4.05E+01	4.09E+01	6
200	6.741	13.475	7	1.67E+00	5.44E+01	2.34E+00	1.67E+00	5.44E+01	3.83E+02	3.85E+02	8
201	6.796	13.214	7	1.02E+00	2.77E+01	1.43E+00	1.02E+00	2.77E+01	1.95E+02	1.97E+02	8
202	6.778	13.317	7	1.23E+00	3.55E+01	1.72E+00	1.23E+00	3.55E+01	2.50E+02	2.52E+02	8
203	6.788	13.359	7	1.08E+00	2.95E+01	1.51E+00	1.08E+00	2.95E+01	2.08E+02	2.10E+02	8
206	6.739	13.622	7	1.63E+00	5.28E+01	2.28E+00	1.63E+00	5.28E+01	3.72E+02	3.74E+02	8
207	6.879	13.872	7	1.03E-01	2.13E+00	1.44E-01	1.03E-01	2.13E+00	1.51E+01	1.52E+01	5
210	5.928	14.339	8	1.47E+00	1.20E+02	2.06E+00	1.47E+00	1.20E+02	8.42E+02	8.44E+02	8
211	5.764	13.557	8	9.77E-01	3.29E+01	1.37E+00	9.77E-01	3.29E+01	2.32E+02	2.33E+02	8
212	5.766	13.622	8	9.86E-01	3.31E+01	1.38E+00	9.86E-01	3.31E+01	2.33E+02	2.34E+02	8
213	5.767	13.674	8	9.88E-01	3.31E+01	1.38E+00	9.88E-01	3.31E+01	2.33E+02	2.34E+02	8
214	5.958	13.839	8	1.68E+00	1.13E+02	2.35E+00	1.68E+00	1.13E+02	7.93E+02	7.96E+02	8
215	5.913	13.903	8	1.65E+00	1.06E+02	2.31E+00	1.65E+00	1.06E+02	7.44E+02	7.47E+02	8
216	5.912	13.851	8	1.65E+00	1.05E+02	2.31E+00	1.65E+00	1.05E+02	7.37E+02	7.40E+02	8
231	5.991	14.398	10	1.49E+00	1.19E+02	2.09E+00	1.49E+00	1.19E+02	8.35E+02	8.37E+02	8
232	6.000	14.484	10	1.45E+00	1.19E+02	2.03E+00	1.45E+00	1.19E+02	8.35E+02	8.37E+02	8
233	6.059	14.191	10	1.61E+00	7.74E+01	2.25E+00	1.61E+00	7.74E+01	5.44E+02	5.46E+02	8
234	6.048	14.352	10	1.55E+00	8.41E+01	2.17E+00	1.55E+00	8.41E+01	5.91E+02	5.93E+02	8
235	5.928	14.253	10	1.51E+00	1.18E+02	2.11E+00	1.51E+00	1.18E+02	8.28E+02	8.30E+02	8
236	5.995	14.318	10	1.52E+00	1.17E+02	2.13E+00	1.52E+00	1.17E+02	8.21E+02	8.23E+02	8
237	6.729	14.564	10	1.24E+00	3.18E+01	1.74E+00	1.24E+00	3.18E+01	2.24E+02	2.26E+02	8
238	6.663	14.478	10	1.97E+00	1.06E+02	2.76E+00	1.97E+00	1.06E+02	7.45E+02	7.48E+02	8
239	6.637	14.483	10	2.22E+00	1.43E+02	3.11E+00	2.22E+00	1.43E+02	1.00E+03	1.01E+03	8
240	5.917	14.848	10	1.18E+00	1.24E+02	1.65E+00	1.18E+00	1.24E+02	8.70E+02	8.71E+02	8
241	5.911	14.774	10	1.24E+00	1.20E+02	1.74E+00	1.24E+00	1.20E+02	8.42E+02	8.43E+02	8
242	5.917	14.700	10	1.29E+00	1.22E+02	1.81E+00	1.29E+00	1.22E+02	8.56E+02	8.58E+02	8
251	7.017	15.446	10	4.60E-05	0.00E+00	6.44E-05	4.60E-05	0.00E+00	6.44E-05	1.29E-04	1
255	6.893	14.961	10	4.19E-04	0.00E+00	5.87E-04	4.19E-04	0.00E+00	5.87E-04	1.17E-03	1
256	6.712	15.037	10	9.84E-01	2.35E+01	1.38E+00	9.84E-01	2.35E+01	1.66E+02	1.67E+02	8
257	6.799	14.963	10	3.92E-01	7.29E-01	5.49E-01	3.92E-01	7.29E-01	5.65E+00	6.20E+00	4
258	6.915	15.505	10	1.67E-04	0.00E+00	2.34E-04	1.67E-04	0.00E+00	2.34E-04	4.68E-04	1
259	6.679	15.833	10	3.78E-01	1.29E+01	5.29E-01	3.78E-01	1.29E+01	9.08E+01	9.14E+01	8
260	6.524	15.940	10	6.79E-01	1.47E+02	9.51E-01	6.79E-01	1.47E+02	1.03E+03	1.03E+03	8
261	6.241	15.673	10	1.10E-01	1.75E+00	1.54E-01	1.10E-01	1.75E+00	1.24E+01	1.26E+01	4
262	6.476	15.623	10	1.28E+00	1.52E+02	1.79E+00	1.28E+00	1.52E+02	1.07E+03	1.07E+03	8
263	6.334	15.995	10	3.54E-01	7.28E+01	4.96E-01	3.54E-01	7.28E+01	5.10E+02	5.11E+02	8
264	6.044	15.980	10	3.53E-01	3.13E+01	4.94E-01	3.53E-01	3.13E+01	2.20E+02	2.20E+02	8
265	6.660	15.900	10	3.69E-01	1.84E+01	5.17E-01	3.69E-01	1.84E+01	1.29E+02	1.30E+02	8
269	5.451	13.254	10	8.93E-04	0.00E+00	1.25E-03	8.93E-04	0.00E+00	1.25E-03	2.50E-03	1
270	5.514	13.209	10	5.59E-02	2.03E-01	7.83E-02	5.59E-02	2.03E-01	1.50E+00	1.58E+00	2
271	5.566	13.193	10	1.03E-01	1.39E+00	1.44E-01	1.03E-01	1.39E+00	9.87E+00	1.00E+01	4
284	7.275	11.825	10	1.26E-05	0.00E+00	1.76E-05	1.26E-05	0.00E+00	1.76E-05	3.53E-05	1
285	7.016	11.743	10	1.50E-01	2.60E+00	2.10E-01	1.50E-01	2.60E+00	1.84E+01	1.86E+01	5
287	7.125	11.776	10	2.76E-02	1.91E-01	3.86E-02	2.76E-02	1.91E-01	1.38E+00	1.41E+00	2
290	7.130	13.786	10	2.95E-05	0.00E+00	4.13E-05	2.95E-05	0.00E+00	4.13E-05	8.26E-05	1
291	6.927	13.730	10	9.43E-02	5.90E-01	1.32E-01	9.43E-02	5.90E-01	4.26E+00	4.39E+00	3
292	7.057	13.229	10	8.89E-05	0.00E+00	1.24E-04	8.89E-05	0.00E+00	1.24E-04	2.49E-04	1
294	7.092	13.854	10	3.47E-05	0.00E+00	4.86E-05	3.47E-05	0.00E+00	4.86E-05	9.72E-05	1
295	5.413	12.882	10	7.05E-05	0.00E+00	9.87E-05	7.05E-05	0.00E+00	9.87E-05	1.97E-04	1
296	5.537	12.816	10	1.12E-01	1.25E+00	1.57E-01	1.12E-01	1.25E+00	8.91E+00	9.06E+00	4
297	5.496	12.799	10	6.02E-02	3.78E-01	8.43E-02	6.02E-02	3.78E-01	2.73E+00	2.81E+00	2
298	5.561	12.909	10	1.32E-01	2.10E+00	1.85E-01	1.32E-01	2.10E+00	1.49E+01	1.51E+01	5
299	5.615	12.839	10	2.08E-01	6.02E+00	2.91E-01	2.08E-01	6.02E+00	4.24E+01	4.27E+01	6
300	5.608	12.984	10	1.74E-01	4.84E+00	2.44E-01	1.74E-01	4.84E+00	3.41E+01	3.44E+01	6

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

302	6.396	11.688	10	4.50E+00	1.73E+02	6.30E+00	4.50E+00	1.73E+02	1.22E+03	1.22E+03	8
303	6.276	11.651	10	3.29E+00	1.24E+02	4.61E+00	3.29E+00	1.24E+02	8.73E+02	8.77E+02	8
304	5.755	11.682	10	1.02E+00	3.47E+01	1.43E+00	1.02E+00	3.47E+01	2.44E+02	2.46E+02	8
305	5.635	11.734	10	3.92E-01	1.22E+01	5.49E-01	3.92E-01	1.22E+01	8.59E+01	8.65E+01	8
306	5.353	11.802	10	7.26E-03	1.55E-02	1.02E-02	7.26E-03	1.55E-02	1.19E-01	1.29E-01	1
307	5.207	11.849	10	3.34E-06	0.00E+00	4.68E-06	3.34E-06	0.00E+00	4.68E-06	9.35E-06	1
309	5.181	11.974	10	2.09E-06	0.00E+00	2.93E-06	2.09E-06	0.00E+00	2.93E-06	5.85E-06	1
323	5.639	15.789	10	1.27E-04	0.00E+00	1.78E-04	1.27E-04	0.00E+00	1.78E-04	3.56E-04	1
324	5.484	15.661	10	2.70E-05	0.00E+00	3.78E-05	2.70E-05	0.00E+00	3.78E-05	7.56E-05	1
325	5.702	14.442	10	3.70E-01	4.57E+00	5.18E-01	3.70E-01	4.57E+00	3.25E+01	3.30E+01	6
326	5.689	14.515	10	2.72E-01	2.89E+00	3.81E-01	2.72E-01	2.89E+00	2.06E+01	2.10E+01	5
327	5.512	14.539	10	4.76E-03	0.00E+00	6.66E-03	4.76E-03	0.00E+00	6.66E-03	1.33E-02	1
328	5.636	14.371	10	2.53E-02	7.12E-01	3.54E-02	2.53E-02	7.12E-01	5.02E+00	5.05E+00	3
329	5.419	13.723	10	2.62E-05	0.00E+00	3.67E-05	2.62E-05	0.00E+00	3.67E-05	7.34E-05	1
330	5.408	13.795	10	2.15E-05	0.00E+00	3.01E-05	2.15E-05	0.00E+00	3.01E-05	6.02E-05	1
331	5.493	13.630	10	2.32E-02	0.00E+00	3.25E-02	2.32E-02	0.00E+00	3.25E-02	6.50E-02	1
332	5.361	13.699	10	1.79E-05	0.00E+00	2.51E-05	1.79E-05	0.00E+00	2.51E-05	5.01E-05	1
333	5.363	13.843	10	1.39E-05	0.00E+00	1.95E-05	1.39E-05	0.00E+00	1.95E-05	3.89E-05	1
334	5.691	13.943	10	3.74E-01	7.82E+00	5.24E-01	3.74E-01	7.82E+00	5.53E+01	5.58E+01	7
335	5.690	14.073	10	3.47E-01	6.55E+00	4.86E-01	3.47E-01	6.55E+00	4.63E+01	4.68E+01	6
336	5.654	14.156	10	7.16E-02	2.23E+00	1.00E-01	7.16E-02	2.23E+00	1.57E+01	1.58E+01	5
337	5.627	13.811	10	7.00E-02	2.33E+00	9.80E-02	7.00E-02	2.33E+00	1.64E+01	1.65E+01	5
338	5.888	12.262	10	1.67E+00	6.81E+01	2.34E+00	1.67E+00	6.81E+01	4.79E+02	4.81E+02	8
339	5.993	12.248	10	1.84E+00	7.60E+01	2.58E+00	1.84E+00	7.60E+01	5.35E+02	5.37E+02	8
340	5.752	12.293	10	9.98E-01	3.36E+01	1.40E+00	9.98E-01	3.36E+01	2.37E+02	2.38E+02	8
341	5.706	12.340	10	7.10E-01	2.36E+01	9.94E-01	7.10E-01	2.36E+01	1.66E+02	1.67E+02	8
342	6.849	12.996	10	3.49E-01	1.34E+01	4.89E-01	3.49E-01	1.34E+01	9.43E+01	9.48E+01	8
343	6.900	12.944	10	2.64E-01	5.20E+00	3.70E-01	2.64E-01	5.20E+00	3.68E+01	3.71E+01	6
344	6.866	12.886	10	3.40E-01	1.15E+01	4.76E-01	3.40E-01	1.15E+01	8.10E+01	8.15E+01	8
345	6.785	13.015	10	1.23E+00	3.69E+01	1.72E+00	1.23E+00	3.69E+01	2.60E+02	2.62E+02	8
346	6.814	13.529	10	6.76E-01	1.66E+01	9.46E-01	6.76E-01	1.66E+01	1.17E+02	1.18E+02	8
347	6.740	13.527	10	1.66E+00	5.41E+01	2.32E+00	1.66E+00	5.41E+01	3.81E+02	3.83E+02	8
348	6.048	14.515	10	1.47E+00	8.35E+01	2.06E+00	1.47E+00	8.35E+01	5.87E+02	5.89E+02	8
349	6.052	12.911	10	1.88E+00	8.33E+01	2.63E+00	1.88E+00	8.33E+01	5.86E+02	5.88E+02	8
350	6.039	13.007	10	1.85E+00	8.64E+01	2.59E+00	1.85E+00	8.64E+01	6.07E+02	6.10E+02	8
351	5.955	12.889	10	1.76E+00	9.64E+01	2.46E+00	1.76E+00	9.64E+01	6.77E+02	6.80E+02	8
352	5.960	12.980	10	1.77E+00	9.91E+01	2.48E+00	1.77E+00	9.91E+01	6.96E+02	6.99E+02	8
353	5.884	13.058	10	1.68E+00	8.51E+01	2.35E+00	1.68E+00	8.51E+01	5.98E+02	6.00E+02	8
354	5.911	13.172	10	1.71E+00	9.15E+01	2.39E+00	1.71E+00	9.15E+01	6.43E+02	6.45E+02	8
355	5.823	13.093	10	1.45E+00	6.11E+01	2.03E+00	1.45E+00	6.11E+01	4.30E+02	4.32E+02	8
356	5.820	13.172	10	1.43E+00	5.86E+01	2.00E+00	1.43E+00	5.86E+01	4.12E+02	4.14E+02	8
357	6.039	13.482	10	1.79E+00	8.56E+01	2.51E+00	1.79E+00	8.56E+01	6.02E+02	6.04E+02	8
358	6.038	13.406	10	1.80E+00	8.55E+01	2.52E+00	1.80E+00	8.55E+01	6.01E+02	6.04E+02	8
359	6.041	13.323	10	1.82E+00	8.39E+01	2.55E+00	1.82E+00	8.39E+01	5.90E+02	5.92E+02	8
360	6.145	13.753	10	1.76E+00	4.62E+01	2.46E+00	1.76E+00	4.62E+01	3.26E+02	3.28E+02	8
361	6.165	13.823	10	1.72E+00	4.55E+01	2.41E+00	1.72E+00	4.55E+01	3.21E+02	3.23E+02	8
362	6.119	13.900	10	1.70E+00	4.97E+01	2.38E+00	1.70E+00	4.97E+01	3.50E+02	3.53E+02	8
396	7.061	14.186	7	2.43E-05	0.00E+00	3.40E-05	2.43E-05	0.00E+00	3.40E-05	6.80E-05	1
397	6.978	14.291	7	2.14E-02	0.00E+00	3.00E-02	2.14E-02	0.00E+00	3.00E-02	5.99E-02	1
398	6.862	14.468	7	3.45E-02	4.34E-01	4.83E-02	3.45E-02	4.34E-01	3.09E+00	3.13E+00	3
399	6.809	14.467	7	4.64E-01	3.94E+00	6.50E-01	4.64E-01	3.94E+00	2.82E+01	2.89E+01	5
402	6.871	14.784	7	5.61E-04	0.00E+00	7.85E-04	5.61E-04	0.00E+00	7.85E-04	1.57E-03	1
403	6.970	14.787	7	2.50E-04	0.00E+00	3.50E-04	2.50E-04	0.00E+00	3.50E-04	7.00E-04	1
404	6.339	15.451	7	8.64E-01	1.34E+02	1.21E+00	8.64E-01	1.34E+02	9.39E+02	9.40E+02	8
405	6.245	15.441	7	1.96E-01	7.86E+00	2.74E-01	1.96E-01	7.86E+00	5.53E+01	5.56E+01	7
406	7.153	12.978	7	5.82E-05	0.00E+00	8.15E-05	5.82E-05	0.00E+00	8.15E-05	1.63E-04	1
407	7.127	13.079	7	6.59E-05	0.00E+00	9.23E-05	6.59E-05	0.00E+00	9.23E-05	1.85E-04	1
408	7.076	12.580	7	1.49E-04	0.00E+00	2.09E-04	1.49E-04	0.00E+00	2.09E-04	4.17E-04	1
409	7.073	12.680	7	1.40E-04	0.00E+00	1.96E-04	1.40E-04	0.00E+00	1.96E-04	3.92E-04	1
414	7.030	13.452	7	2.18E-02	0.00E+00	3.05E-02	2.18E-02	0.00E+00	3.05E-02	6.10E-02	1
415	7.077	13.448	7	6.51E-05	0.00E+00	9.11E-05	6.51E-05	0.00E+00	9.11E-05	1.82E-04	1
416	5.798	12.686	7	1.28E+00	4.82E+01	1.79E+00	1.28E+00	4.82E+01	3.39E+02	3.41E+02	8
417	5.881	12.714	7	1.67E+00	7.46E+01	2.34E+00	1.67E+00	7.46E+01	5.25E+02	5.27E+02	8
419	5.264	13.099	7	4.64E-06	0.00E+00	6.50E-06	4.64E-06	0.00E+00	6.50E-06	1.30E-05	1
420	5.601	12.207	7	2.84E-01	7.25E+00	3.98E-01	2.84E-01	7.25E+00	5.11E+01	5.15E+01	7
421	5.517	12.227	7	1.27E-01	1.84E+00	1.78E-01	1.27E-01	1.84E+00	1.31E+01	1.32E+01	4
426	6.795	13.441	7	9.56E-01	2.43E+01	1.34E+00	9.56E-01	2.43E+01	1.71E+02	1.73E+02	8
427	6.756	13.385	7	1.50E+00	4.57E+01	2.10E+00	1.50E+00	4.57E+01	3.22E+02	3.24E+02	8
428	6.744	13.296	7	1.70E+00	5.55E+01	2.38E+00	1.70E+00	5.55E+01	3.91E+02	3.93E+02	8
429	6.741	13.225	7	1.77E+00	5.92E+01	2.48E+00	1.77E+00	5.92E+01	4.17E+02	4.19E+02	8
432	6.970	13.918	7	4.42E-02	0.00E+00	6.19E-02	4.42E-02	0.00E+00	6.19E-02	1.24E-01	1
433	6.824	14.074	7	4.00E-01	6.62E+00	5.60E-01	4.00E-01	6.62E+00	4.69E+01	4.75E+01	6
437	7.031	14.651	8	1.27E-03	0.00E+00	1.78E-03	1.27E-03	0.00E+00	1.78E-03	3.56E-03	1
442	5.998	14.225	8	1.57E+00	1.15E+02	2.20E+00	1.57E+00	1.15E+02	8.07E+02	8.09E+02	8

Table G4
VX Exposure Estimates
Light Infantry Brigade, Defense

443	5.724	13.641	8	6.66E-01	1.86E+01	9.32E-01	6.66E-01	1.86E+01	1.31E+02	1.32E+02	8
444	5.772	13.525	8	1.04E+00	3.67E+01	1.46E+00	1.04E+00	3.67E+01	2.58E+02	2.60E+02	8
445	5.724	13.585	8	6.73E-01	1.92E+01	9.42E-01	6.73E-01	1.92E+01	1.35E+02	1.36E+02	8
446	5.932	13.871	8	1.66E+00	1.10E+02	2.32E+00	1.66E+00	1.10E+02	7.72E+02	7.75E+02	8
447	5.920	13.941	8	1.65E+00	1.09E+02	2.31E+00	1.65E+00	1.09E+02	7.65E+02	7.68E+02	8
448	5.927	13.817	8	1.66E+00	1.08E+02	2.32E+00	1.66E+00	1.08E+02	7.58E+02	7.61E+02	8
Case 2: Protected 4 rounds at aimpoint (5.90, 15.70)											
1	6.093	14.476	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E+00	9.10E+00	9.10E+00	4
2	6.092	14.323	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E+00	6.53E+01	6.53E+01	7
3	6.056	14.272	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E+00	1.14E+01	1.14E+01	4
5	5.996	14.233	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.48E+00	5.24E+01	5.24E+01	7
97	5.610	14.388	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.92E+01	5.54E+02	5.54E+02	8
98	5.554	14.447	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+01	9.38E+01	9.38E+01	8
99	5.616	14.500	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E+01	3.79E+02	3.79E+02	8
100	5.667	14.564	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.44E+00	5.21E+01	5.21E+01	7
106	5.642	13.947	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E+00	2.46E+01	2.46E+01	5
108	5.627	14.130	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E+01	1.89E+02	1.89E+02	8
109	5.702	14.036	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-01	2.62E+00	2.62E+00	2
129	6.018	13.474	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E+01	3.56E+02	3.56E+02	8
130	6.010	13.396	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E+01	2.23E+02	2.23E+02	8
131	6.016	13.310	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E+00	2.12E+01	2.12E+01	5
132	6.074	13.908	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E+01	1.53E+02	1.53E+02	8
133	6.062	13.731	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E+01	1.32E+02	1.32E+02	8
134	6.072	13.821	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E+01	1.36E+02	1.36E+02	8
214	5.958	13.839	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E+01	1.18E+02	1.18E+02	8
215	5.913	13.903	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-01	4.50E+00	4.50E+00	3
216	5.912	13.851	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E+00	9.03E+00	9.03E+00	4
233	6.059	14.191	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E+00	2.04E+01	2.04E+01	5
325	5.702	14.442	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.72E-02	5.40E-01	5.40E-01	2
326	5.689	14.515	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E+00	1.89E+01	1.89E+01	5
327	5.512	14.539	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-01	5.89E+00	5.89E+00	3
328	5.636	14.371	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E+01	3.22E+02	3.22E+02	8
334	5.691	13.943	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-01	4.06E+00	4.06E+00	3
335	5.690	14.073	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E+00	1.78E+01	1.78E+01	5
336	5.654	14.156	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E+01	1.20E+02	1.20E+02	8
357	6.039	13.482	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E+01	2.41E+02	2.41E+02	8
358	6.038	13.406	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E+01	1.44E+02	1.44E+02	8
359	6.041	13.323	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E+00	2.88E+01	2.88E+01	5
360	6.145	13.753	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E+01	2.80E+02	2.80E+02	8
361	6.165	13.823	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E+01	4.85E+02	4.85E+02	8
362	6.119	13.900	10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E+01	4.64E+02	4.64E+02	8
442	5.998	14.225	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.74E+00	6.12E+01	6.12E+01	7
446	5.932	13.871	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.69E+00	1.88E+01	1.88E+01	5
447	5.920	13.941	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-01	5.59E+00	5.59E+00	3
448	5.927	13.817	8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E+00	2.79E+01	2.79E+01	5

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

Mustard (HD) 152mm Artillery
Light Attack
Release Height: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
18 rounds at aimpoint (6.00, 14.55)									
1	6.093	14.476	10	4.67E+02	5.83E+02	1.30E+03	6	6	6
2	6.092	14.323	10	8.51E+01	1.45E+02	2.92E+02	4	3	4
3	6.056	14.272	10	2.86E+01	5.10E+01	1.01E+02	2	1	3
4	5.928	14.340	10	1.55E-05	0.00E+00	1.55E-05	1	1	1
5	5.996	14.233	10	1.61E+01	3.75E+01	6.97E+01	2	1	2
6	5.940	14.453	10	5.02E-02	0.00E+00	5.02E-02	1	1	1
120	6.033	14.438	10	5.21E+02	1.18E+03	2.21E+03	6	6	7
132	6.074	13.908	10	0.00E+00	3.55E-02	5.07E-02	1	1	1
210	5.928	14.339	8	1.55E-05	0.00E+00	1.55E-05	1	1	1
231	5.991	14.398	10	1.98E+02	4.77E+02	8.79E+02	6	5	6
232	6.000	14.484	10	2.01E+02	7.32E+02	1.25E+03	6	5	6
233	6.059	14.191	10	9.95E+00	3.20E+01	5.57E+01	2	1	2
234	6.048	14.352	10	9.75E+01	5.38E+02	8.66E+02	4	3	6
235	5.928	14.253	10	1.15E-05	0.00E+00	1.15E-05	1	1	1
236	5.995	14.318	10	4.25E+01	6.33E+01	1.33E+02	2	1	3
348	6.048	14.515	10	3.23E+02	2.34E+03	3.67E+03	6	6	7
442	5.998	14.225	8	1.36E+01	4.55E+01	7.86E+01	2	1	2

**Case 2a: Protected (Eye,
Respiratory Exposure)**

18 rounds at aimpoint (4.60, 14.55)									
87	4.622	14.157	10	1.95E-01	3.60E+00	1.95E-01	1	1	
88	4.642	14.033	10	4.66E-01	4.07E-02	4.66E-01	1	1	
90	4.691	14.480	10	7.68E-02	5.47E+02	7.68E-02	1	1	
314	4.628	13.951	10	3.90E-02	0.00E+00	3.90E-02	1	1	
315	4.617	14.139	10	4.75E-01	5.29E+00	4.75E-01	1	1	
317	4.708	14.090	10	1.73E-02	0.00E+00	1.73E-02	1	1	
318	4.638	14.400	10	3.34E-01	8.60E+02	3.34E-01	1	1	

**Case 2b: Protected (Skin
Exposure)**

18 rounds at aimpoint (4.60, 14.55)									
87	4.622	14.157	10	5.71E-01	1.15E+01	1.70E+01			1
88	4.642	14.033	10	1.33E+00	3.79E+00	6.74E+00			1
90	4.691	14.480	10	1.15E+00	1.57E+03	2.24E+03			7
314	4.628	13.951	10	1.12E-01	3.04E-01	5.46E-01			1
315	4.617	14.139	10	1.38E+00	1.78E+01	2.68E+01			2
317	4.708	14.090	10	4.96E-02	2.84E-01	4.55E-01			1
318	4.638	14.400	10	4.88E+00	2.46E+03	3.52E+03			7

Mustard (HD) MRLS
Moderate Attack
Release Height: 15m

**Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)**

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
240 rounds at aimpoint (5.70, 17.85)									
1	6.093	14.476	10	9.99E+00	0.00E+00	9.99E+00	2	1	1
2	6.092	14.323	10	1.06E+01	0.00E+00	1.06E+01	2	1	1
3	6.056	14.272	10	2.24E+01	0.00E+00	2.24E+01	2	1	1
4	5.928	14.340	10	8.13E+01	0.00E+00	8.13E+01	4	3	2
5	5.996	14.233	10	5.11E+01	0.00E+00	5.11E+01	3	2	2
6	5.940	14.453	10	7.94E+01	0.00E+00	7.94E+01	4	3	2
10	5.849	14.797	10	1.05E+02	0.00E+00	1.05E+02	5	4	3
11	5.840	14.745	10	1.04E+02	0.00E+00	1.04E+02	5	4	3
12	5.853	14.870	10	1.07E+02	0.00E+00	1.07E+02	5	4	3
35	5.984	15.987	10	7.46E+01	0.00E+00	7.46E+01	4	3	2
36	6.098	15.997	10	1.34E+00	0.00E+00	1.34E+00	1	1	1
40	5.550	13.245	10	6.85E+01	0.00E+00	6.85E+01	3	2	2
41	5.474	13.201	10	4.73E+01	0.00E+00	4.73E+01	2	1	2
42	5.507	13.288	10	5.83E+01	0.00E+00	5.83E+01	3	2	2
67	5.560	12.798	10	6.14E+01	0.00E+00	6.14E+01	3	2	2
68	5.483	12.959	10	4.66E+01	0.00E+00	4.66E+01	2	1	2
69	5.563	12.908	10	6.40E+01	0.00E+00	6.40E+01	3	2	2
70	5.463	12.826	10	3.91E+01	0.00E+00	3.91E+01	2	1	2

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

71	5.648	12.900	10	7.41E+01	0.00E+00	7.41E+01	4	3	2
72	5.451	12.890	10	3.66E+01	0.00E+00	3.66E+01	2	1	2
73	5.605	10.601	10	1.13E+01	0.00E+00	1.13E+01	2	1	1
76	5.720	11.676	10	4.16E+01	0.00E+00	4.16E+01	2	1	2
77	5.601	11.699	10	4.14E+01	0.00E+00	4.14E+01	2	1	2
78	5.331	11.805	10	5.17E+00	0.00E+00	5.17E+00	2	1	1
94	5.423	15.512	10	4.94E+01	0.00E+00	4.94E+01	2	1	2
95	5.601	15.674	10	1.23E+02	0.00E+00	1.23E+02	5	4	3
96	5.747	15.847	10	1.19E+02	0.00E+00	1.19E+02	5	4	3
97	5.610	14.388	10	1.03E+02	0.00E+00	1.03E+02	5	4	3
98	5.554	14.447	10	9.12E+01	0.00E+00	9.12E+01	4	3	2
99	5.616	14.500	10	1.06E+02	0.00E+00	1.06E+02	5	4	3
100	5.667	14.564	10	1.12E+02	0.00E+00	1.12E+02	5	4	3
101	5.392	13.905	10	2.74E+01	0.00E+00	2.74E+01	2	1	2
102	5.474	13.777	10	5.47E+01	0.00E+00	5.47E+01	3	2	2
103	5.406	13.666	10	3.03E+01	0.00E+00	3.03E+01	2	1	2
104	5.461	13.842	10	5.08E+01	0.00E+00	5.08E+01	3	2	2
105	5.476	13.706	10	5.46E+01	0.00E+00	5.46E+01	3	2	2
106	5.642	13.947	10	9.76E+01	0.00E+00	9.76E+01	4	3	2
107	5.653	13.814	10	9.53E+01	0.00E+00	9.53E+01	4	3	2
108	5.627	14.130	10	9.97E+01	0.00E+00	9.97E+01	4	3	2
109	5.702	14.036	10	9.87E+01	0.00E+00	9.87E+01	4	3	2
110	5.702	12.379	10	6.02E+01	0.00E+00	6.02E+01	3	2	2
111	5.784	12.296	10	5.57E+01	0.00E+00	5.57E+01	3	2	2
112	5.875	12.255	10	5.03E+01	0.00E+00	5.03E+01	3	2	2
113	5.966	12.148	10	3.46E+01	0.00E+00	3.46E+01	2	1	2
120	6.033	14.438	10	3.33E+01	0.00E+00	3.33E+01	2	1	2
121	6.032	12.989	10	2.59E+01	0.00E+00	2.59E+01	2	1	2
122	5.929	12.964	10	5.60E+01	0.00E+00	5.60E+01	3	2	2
123	6.033	12.883	10	2.46E+01	0.00E+00	2.46E+01	2	1	1
124	5.934	12.874	10	5.32E+01	0.00E+00	5.32E+01	3	2	2
125	5.888	13.090	10	6.62E+01	0.00E+00	6.62E+01	3	2	2
126	5.793	13.170	10	7.53E+01	0.00E+00	7.53E+01	4	3	2
127	5.789	13.080	10	7.35E+01	0.00E+00	7.35E+01	4	3	2
128	5.929	13.162	10	5.95E+01	0.00E+00	5.95E+01	3	2	2
129	6.018	13.474	10	3.50E+01	0.00E+00	3.50E+01	2	1	2
130	6.010	13.396	10	3.74E+01	0.00E+00	3.74E+01	2	1	2
131	6.016	13.310	10	3.43E+01	0.00E+00	3.43E+01	2	1	2
132	6.074	13.908	10	1.64E+01	0.00E+00	1.64E+01	2	1	1
133	6.062	13.731	10	1.96E+01	0.00E+00	1.96E+01	2	1	1
134	6.072	13.821	10	1.69E+01	0.00E+00	1.69E+01	2	1	1
189	5.211	12.855	7	1.62E-01	0.00E+00	1.62E-01	1	1	1
190	5.817	12.688	7	6.36E+01	0.00E+00	6.36E+01	3	2	2
191	5.850	12.720	7	6.27E+01	0.00E+00	6.27E+01	3	2	2
193	5.224	13.195	7	3.88E-01	0.00E+00	3.88E-01	1	1	1
194	5.504	12.164	7	3.89E+01	0.00E+00	3.89E+01	2	1	2
195	5.583	12.163	7	5.09E+01	0.00E+00	5.09E+01	3	2	2
210	5.928	14.339	8	8.12E+01	0.00E+00	8.12E+01	4	3	2
211	5.764	13.557	8	8.44E+01	0.00E+00	8.44E+01	4	3	2
212	5.766	13.622	8	8.56E+01	0.00E+00	8.56E+01	4	3	2
213	5.767	13.674	8	8.66E+01	0.00E+00	8.66E+01	4	3	2
214	5.958	13.839	8	6.24E+01	0.00E+00	6.24E+01	3	2	2
215	5.913	13.903	8	7.75E+01	0.00E+00	7.75E+01	4	3	2
216	5.912	13.851	8	7.68E+01	0.00E+00	7.68E+01	4	3	2
231	5.991	14.398	10	5.49E+01	0.00E+00	5.49E+01	3	2	2
232	6.000	14.484	10	5.11E+01	0.00E+00	5.11E+01	3	2	2
233	6.059	14.191	10	2.14E+01	0.00E+00	2.14E+01	2	1	1
234	6.048	14.352	10	2.54E+01	0.00E+00	2.54E+01	2	1	2
235	5.928	14.253	10	7.96E+01	0.00E+00	7.96E+01	4	3	2
236	5.995	14.318	10	5.23E+01	0.00E+00	5.23E+01	3	2	2
240	5.917	14.848	10	9.89E+01	0.00E+00	9.89E+01	4	3	2
241	5.911	14.774	10	9.85E+01	0.00E+00	9.85E+01	4	3	2
242	5.917	14.700	10	9.39E+01	0.00E+00	9.39E+01	4	3	2
264	6.044	15.980	10	2.09E+01	0.00E+00	2.09E+01	2	1	1
269	5.451	13.254	10	4.09E+01	0.00E+00	4.09E+01	2	1	2
270	5.514	13.209	10	5.88E+01	0.00E+00	5.88E+01	3	2	2
271	5.566	13.193	10	7.04E+01	0.00E+00	7.04E+01	4	3	2
295	5.413	12.882	10	2.62E+01	0.00E+00	2.62E+01	2	1	2
296	5.537	12.816	10	5.72E+01	0.00E+00	5.72E+01	3	2	2

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

297	5.496	12.799	10	4.77E+01	0.00E+00	4.77E+01	2	1	2
298	5.561	12.909	10	6.37E+01	0.00E+00	6.37E+01	3	2	2
299	5.615	12.839	10	7.00E+01	0.00E+00	7.00E+01	4	3	2
300	5.608	12.984	10	7.28E+01	0.00E+00	7.28E+01	4	3	2
304	5.755	11.682	10	4.06E+01	0.00E+00	4.06E+01	2	1	2
305	5.635	11.734	10	4.40E+01	0.00E+00	4.40E+01	2	1	2
306	5.353	11.802	10	7.52E+00	0.00E+00	7.52E+00	2	1	1
307	5.207	11.849	10	1.53E-02	0.00E+00	1.53E-02	1	1	1
322	5.324	15.511	10	7.03E+00	0.00E+00	7.03E+00	2	1	1
323	5.639	15.789	10	1.31E+02	0.00E+00	1.31E+02	5	4	3
324	5.484	15.661	10	8.01E+01	0.00E+00	8.01E+01	4	3	2
325	5.702	14.442	10	1.07E+02	0.00E+00	1.07E+02	5	4	3
326	5.689	14.515	10	1.09E+02	0.00E+00	1.09E+02	5	4	3
327	5.512	14.539	10	7.92E+01	0.00E+00	7.92E+01	4	3	2
328	5.636	14.371	10	1.06E+02	0.00E+00	1.06E+02	5	4	3
329	5.419	13.723	10	3.52E+01	0.00E+00	3.52E+01	2	1	2
330	5.408	13.795	10	3.19E+01	0.00E+00	3.19E+01	2	1	2
331	5.493	13.630	10	5.95E+01	0.00E+00	5.95E+01	3	2	2
332	5.361	13.699	10	1.78E+01	0.00E+00	1.78E+01	2	1	1
333	5.363	13.843	10	1.88E+01	0.00E+00	1.88E+01	2	1	1
334	5.691	13.943	10	9.70E+01	0.00E+00	9.70E+01	4	3	2
335	5.690	14.073	10	1.00E+02	0.00E+00	1.00E+02	5	4	3
336	5.654	14.156	10	1.03E+02	0.00E+00	1.03E+02	5	4	3
337	5.627	13.811	10	9.27E+01	0.00E+00	9.27E+01	4	3	2
338	5.888	12.262	10	4.95E+01	0.00E+00	4.95E+01	2	1	2
339	5.993	12.248	10	2.96E+01	0.00E+00	2.96E+01	2	1	2
340	5.752	12.293	10	5.59E+01	0.00E+00	5.59E+01	3	2	2
341	5.706	12.340	10	5.90E+01	0.00E+00	5.90E+01	3	2	2
348	6.048	14.515	10	2.55E+01	0.00E+00	2.55E+01	2	1	2
349	6.052	12.911	10	1.88E+01	0.00E+00	1.88E+01	2	1	1
350	6.039	13.007	10	2.37E+01	0.00E+00	2.37E+01	2	1	1
351	5.955	12.889	10	4.85E+01	0.00E+00	4.85E+01	2	1	2
352	5.960	12.980	10	4.87E+01	0.00E+00	4.87E+01	2	1	2
353	5.884	13.058	10	6.59E+01	0.00E+00	6.59E+01	3	2	2
354	5.911	13.172	10	6.39E+01	0.00E+00	6.39E+01	3	2	2
355	5.823	13.093	10	7.22E+01	0.00E+00	7.22E+01	4	3	2
356	5.820	13.172	10	7.41E+01	0.00E+00	7.41E+01	4	3	2
357	6.039	13.482	10	2.67E+01	0.00E+00	2.67E+01	2	1	2
358	6.038	13.406	10	2.67E+01	0.00E+00	2.67E+01	2	1	2
359	6.041	13.323	10	2.49E+01	0.00E+00	2.49E+01	2	1	1
360	6.145	13.753	10	1.94E+00	0.00E+00	1.94E+00	1	1	1
361	6.165	13.823	10	8.80E-01	0.00E+00	8.80E-01	1	1	1
362	6.119	13.900	10	5.74E+00	0.00E+00	5.74E+00	2	1	1
416	5.798	12.686	7	6.44E+01	0.00E+00	6.44E+01	3	2	2
417	5.881	12.714	7	5.93E+01	0.00E+00	5.93E+01	3	2	2
418	5.228	13.115	7	4.36E-01	0.00E+00	4.36E-01	1	1	1
419	5.264	13.099	7	1.90E+00	0.00E+00	1.90E+00	1	1	1
420	5.601	12.207	7	5.43E+01	0.00E+00	5.43E+01	3	2	2
421	5.517	12.227	7	4.23E+01	0.00E+00	4.23E+01	2	1	2
439	5.211	12.851	8	1.62E-01	0.00E+00	1.62E-01	1	1	1
442	5.998	14.225	8	5.01E+01	0.00E+00	5.01E+01	3	2	2
443	5.724	13.641	8	8.85E+01	0.00E+00	8.85E+01	4	3	2
444	5.772	13.525	8	8.34E+01	0.00E+00	8.34E+01	4	3	2
445	5.724	13.585	8	8.73E+01	0.00E+00	8.73E+01	4	3	2
446	5.932	13.871	8	7.14E+01	0.00E+00	7.14E+01	4	3	2
447	5.920	13.941	8	7.62E+01	0.00E+00	7.62E+01	4	3	2
448	5.927	13.817	8	7.18E+01	0.00E+00	7.18E+01	4	3	2

**Case 2a: Protected (Eye,
Respiratory Exposure)**

240 rounds at aimpoint (5.75, 15.05)									
1	6.093	14.476	10	5.44E-01	2.98E+00	5.44E-01	1	1	
2	6.092	14.323	10	1.54E+00	5.88E-01	1.54E+00	1	1	
3	6.056	14.272	10	1.02E+01	4.48E+00	1.02E+01	2	1	
4	5.928	14.340	10	1.70E+01	1.02E+02	1.70E+01	2	1	
5	5.996	14.233	10	1.49E+01	6.28E+00	1.49E+01	2	1	
6	5.940	14.453	10	1.17E+01	4.20E+02	1.17E+01	2	1	
10	5.849	14.797	10	1.70E+00	2.48E+02	1.70E+00	1	1	
11	5.840	14.745	10	2.52E+00	2.63E+02	2.52E+00	1	1	
12	5.853	14.870	10	6.02E-01	2.61E+02	6.02E-01	1	1	
97	5.610	14.388	10	1.75E+01	2.58E+02	1.75E+01	2	1	
98	5.554	14.447	10	5.80E+00	5.94E+01	5.80E+00	2	1	

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

99	5.616	14.500	10	1.28E+01	2.28E+02	1.28E+01	2	1	
100	5.667	14.564	10	7.32E+00	1.17E+02	7.32E+00	2	1	
101	5.392	13.905	10	4.01E-02	0.00E+00	4.01E-02	1	1	
102	5.474	13.777	10	9.23E-01	0.00E+00	9.23E-01	1	1	
103	5.406	13.666	10	8.13E-04	0.00E+00	8.13E-04	1	1	
104	5.461	13.842	10	6.84E-01	0.00E+00	6.84E-01	1	1	
105	5.476	13.706	10	4.39E-01	0.00E+00	4.39E-01	1	1	
106	5.642	13.947	10	1.10E+01	1.46E-01	1.10E+01	2	1	
107	5.653	13.814	10	6.18E+00	0.00E+00	6.18E+00	2	1	
108	5.627	14.130	10	1.67E+01	9.29E+00	1.67E+01	2	1	
109	5.702	14.036	10	1.31E+01	1.08E+00	1.31E+01	2	1	
120	6.033	14.438	10	5.74E+00	9.29E+01	5.74E+00	2	1	
132	6.074	13.908	10	2.11E+00	0.00E+00	2.11E+00	1	1	
133	6.062	13.731	10	3.29E-01	0.00E+00	3.29E-01	1	1	
134	6.072	13.821	10	5.12E-01	0.00E+00	5.12E-01	1	1	
210	5.928	14.339	8	1.71E+01	1.00E+02	1.71E+01	2	1	
211	5.764	13.557	8	2.29E-01	0.00E+00	2.29E-01	1	1	
212	5.766	13.622	8	3.49E-01	0.00E+00	3.49E-01	1	1	
213	5.767	13.674	8	1.07E+00	0.00E+00	1.07E+00	1	1	
214	5.958	13.839	8	5.55E+00	0.00E+00	5.55E+00	2	1	
215	5.913	13.903	8	1.02E+01	0.00E+00	1.02E+01	2	1	
216	5.912	13.851	8	7.72E+00	0.00E+00	7.72E+00	2	1	
231	5.991	14.398	10	1.02E+01	5.44E+01	1.02E+01	2	1	
232	6.000	14.484	10	6.05E+00	5.79E+01	6.05E+00	2	1	
233	6.059	14.191	10	9.91E+00	9.46E-01	9.91E+00	2	1	
234	6.048	14.352	10	8.41E+00	1.69E+01	8.41E+00	2	1	
235	5.928	14.253	10	2.16E+01	2.83E+01	2.16E+01	2	1	
236	5.995	14.318	10	1.28E+01	1.60E+01	1.28E+01	2	1	
240	5.917	14.848	10	2.28E-01	2.35E+02	2.28E-01	1	1	
241	5.911	14.774	10	1.01E+00	2.30E+02	1.01E+00	1	1	
242	5.917	14.700	10	1.69E+00	2.73E+02	1.69E+00	1	1	
325	5.702	14.442	10	1.19E+01	8.49E+01	1.19E+01	2	1	
326	5.689	14.515	10	9.58E+00	7.14E+01	9.58E+00	2	1	
327	5.512	14.539	10	2.38E+00	3.08E+01	2.38E+00	1	1	
328	5.636	14.371	10	1.43E+01	2.30E+02	1.43E+01	2	1	
329	5.419	13.723	10	1.17E-02	0.00E+00	1.17E-02	1	1	
330	5.408	13.795	10	9.82E-03	0.00E+00	9.82E-03	1	1	
334	5.691	13.943	10	1.02E+01	3.50E-02	1.02E+01	2	1	
335	5.690	14.073	10	1.39E+01	1.90E+00	1.39E+01	2	1	
336	5.654	14.156	10	1.48E+01	9.62E+00	1.48E+01	2	1	
337	5.627	13.811	10	5.28E+00	0.00E+00	5.28E+00	2	1	
348	6.048	14.515	10	3.24E+00	1.40E+02	3.24E+00	1	1	
362	6.119	13.900	10	2.99E-02	0.00E+00	2.99E-02	1	1	
442	5.998	14.225	8	1.43E+01	5.17E+00	1.43E+01	2	1	
443	5.724	13.641	8	3.23E-01	0.00E+00	3.23E-01	1	1	
444	5.772	13.525	8	1.28E-01	0.00E+00	1.28E-01	1	1	
445	5.724	13.585	8	2.28E-01	0.00E+00	2.28E-01	1	1	
446	5.932	13.871	8	8.21E+00	0.00E+00	8.21E+00	2	1	
447	5.920	13.941	8	1.20E+01	8.96E-03	1.20E+01	2	1	
448	5.927	13.817	8	6.02E+00	0.00E+00	6.02E+00	2	1	

Case 2b: Protected (Skin Exposure)

240 rounds at aimpoint (5.75, 15.05)

1	6.093	14.476	10	1.57E+00	8.51E+00	1.37E+01			1
2	6.092	14.323	10	4.40E+00	1.88E+00	7.09E+00			1
3	6.056	14.272	10	2.91E+01	1.49E+01	5.04E+01			2
4	5.928	14.340	10	5.20E+01	2.93E+02	4.71E+02			4
5	5.996	14.233	10	4.87E+01	1.97E+01	7.68E+01			2
6	5.940	14.453	10	3.42E+01	1.21E+03	1.76E+03			7
10	5.849	14.797	10	5.39E+00	7.08E+02	1.02E+03			6
11	5.840	14.745	10	7.73E+00	7.53E+02	1.08E+03			6
12	5.853	14.870	10	2.16E+00	7.46E+02	1.07E+03			6
40	5.550	13.245	10	8.34E+01	0.00E+00	8.34E+01			2
41	5.474	13.201	10	4.89E+01	0.00E+00	4.89E+01			2
42	5.507	13.288	10	6.88E+01	0.00E+00	6.88E+01			2
67	5.560	12.798	10	7.20E+01	0.00E+00	7.20E+01			2
68	5.483	12.959	10	5.09E+01	0.00E+00	5.09E+01			2
69	5.563	12.908	10	8.06E+01	0.00E+00	8.06E+01			2
70	5.463	12.826	10	3.70E+01	0.00E+00	3.70E+01			2
71	5.648	12.900	10	1.05E+02	0.00E+00	1.05E+02			3
72	5.451	12.890	10	3.25E+01	0.00E+00	3.25E+01			2

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

76	5.720	11.676	10	3.83E-03	0.00E+00	3.83E-03			1
97	5.610	14.388	10	5.55E+01	7.40E+02	1.11E+03			6
98	5.554	14.447	10	1.69E+01	1.70E+02	2.60E+02			4
99	5.616	14.500	10	3.76E+01	6.57E+02	9.76E+02			6
100	5.667	14.564	10	2.14E+01	3.37E+02	5.03E+02			5
101	5.392	13.905	10	2.13E+00	0.00E+00	2.13E+00			1
102	5.474	13.777	10	4.39E+01	0.00E+00	4.39E+01			2
103	5.406	13.666	10	8.49E+00	0.00E+00	8.49E+00			1
104	5.461	13.842	10	3.40E+01	0.00E+00	3.40E+01			2
105	5.476	13.706	10	4.75E+01	0.00E+00	4.75E+01			2
106	5.642	13.947	10	9.45E+01	2.26E+00	9.77E+01			2
107	5.653	13.814	10	1.06E+02	1.70E-01	1.06E+02			3
108	5.627	14.130	10	8.03E+01	2.77E+01	1.20E+02			3
109	5.702	14.036	10	8.21E+01	4.95E+00	8.92E+01			2
110	5.702	12.379	10	3.59E+01	0.00E+00	3.59E+01			2
111	5.784	12.296	10	2.04E+01	0.00E+00	2.04E+01			1
112	5.875	12.255	10	1.20E+01	0.00E+00	1.20E+01			1
113	5.966	12.148	10	5.61E+00	0.00E+00	5.61E+00			1
120	6.033	14.438	10	1.66E+01	2.66E+02	3.97E+02			4
121	6.032	12.989	10	6.75E+01	0.00E+00	6.75E+01			2
122	5.929	12.964	10	1.07E+02	0.00E+00	1.07E+02			3
123	6.033	12.883	10	6.40E+01	0.00E+00	6.40E+01			2
124	5.934	12.874	10	1.03E+02	0.00E+00	1.03E+02			3
125	5.888	13.090	10	1.05E+02	0.00E+00	1.05E+02			3
126	5.793	13.170	10	1.14E+02	0.00E+00	1.14E+02			3
127	5.789	13.080	10	1.13E+02	0.00E+00	1.13E+02			3
128	5.929	13.162	10	1.15E+02	0.00E+00	1.15E+02			3
129	6.018	13.474	10	8.45E+01	0.00E+00	8.45E+01			2
130	6.010	13.396	10	9.06E+01	0.00E+00	9.06E+01			2
131	6.016	13.310	10	8.53E+01	0.00E+00	8.53E+01			2
132	6.074	13.908	10	2.94E+01	0.00E+00	2.94E+01			2
133	6.062	13.731	10	4.53E+01	0.00E+00	4.53E+01			2
134	6.072	13.821	10	3.33E+01	0.00E+00	3.33E+01			2
190	5.817	12.688	7	7.56E+01	0.00E+00	7.56E+01			2
191	5.850	12.720	7	7.54E+01	0.00E+00	7.54E+01			2
194	5.504	12.164	7	3.40E+00	0.00E+00	3.40E+00			1
195	5.583	12.163	7	5.79E+00	0.00E+00	5.79E+00			1
210	5.928	14.339	8	5.22E+01	2.89E+02	4.65E+02			4
211	5.764	13.557	8	1.23E+02	0.00E+00	1.23E+02			3
212	5.766	13.622	8	1.20E+02	0.00E+00	1.20E+02			3
213	5.767	13.674	8	1.17E+02	0.00E+00	1.17E+02			3
214	5.958	13.839	8	1.10E+02	3.93E-02	1.10E+02			3
215	5.913	13.903	8	9.54E+01	9.25E-01	9.67E+01			2
216	5.912	13.851	8	9.88E+01	2.59E-01	9.92E+01			2
231	5.991	14.398	10	3.02E+01	1.58E+02	2.56E+02			4
232	6.000	14.484	10	1.74E+01	1.66E+02	2.55E+02			4
233	6.059	14.191	10	3.26E+01	4.65E+00	3.92E+01			2
234	6.048	14.352	10	2.42E+01	4.96E+01	9.51E+01			2
235	5.928	14.253	10	6.74E+01	8.29E+01	1.86E+02			3
236	5.995	14.318	10	3.89E+01	4.80E+01	1.07E+02			3
240	5.917	14.848	10	7.94E-01	6.73E+02	9.62E+02			6
241	5.911	14.774	10	3.39E+00	6.58E+02	9.43E+02			6
242	5.917	14.700	10	5.64E+00	7.80E+02	1.12E+03			6
269	5.451	13.254	10	3.46E+01	0.00E+00	3.46E+01			2
270	5.514	13.209	10	7.03E+01	0.00E+00	7.03E+01			2
271	5.566	13.193	10	8.94E+01	0.00E+00	8.94E+01			2
295	5.413	12.882	10	1.58E+01	0.00E+00	1.58E+01			1
296	5.537	12.816	10	6.67E+01	0.00E+00	6.67E+01			2
297	5.496	12.799	10	5.14E+01	0.00E+00	5.14E+01			2
298	5.561	12.909	10	8.00E+01	0.00E+00	8.00E+01			2
299	5.615	12.839	10	9.17E+01	0.00E+00	9.17E+01			2
300	5.608	12.984	10	9.90E+01	0.00E+00	9.90E+01			2
304	5.755	11.682	10	6.17E-03	0.00E+00	6.17E-03			1
325	5.702	14.442	10	3.50E+01	2.44E+02	3.84E+02			4
326	5.689	14.515	10	2.78E+01	2.06E+02	3.22E+02			4
327	5.512	14.539	10	6.89E+00	8.80E+01	1.33E+02			3
328	5.636	14.371	10	4.69E+01	6.58E+02	9.87E+02			6
329	5.419	13.723	10	1.45E+01	0.00E+00	1.45E+01			1
330	5.408	13.795	10	7.75E+00	0.00E+00	7.75E+00			1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

331	5.493	13.630	10	6.07E+01	0.00E+00	6.07E+01			2
332	5.361	13.699	10	1.08E+00	0.00E+00	1.08E+00			1
333	5.363	13.843	10	8.31E-01	0.00E+00	8.31E-01			1
334	5.691	13.943	10	9.26E+01	1.44E+00	9.47E+01			2
335	5.690	14.073	10	7.82E+01	6.66E+00	8.77E+01			2
336	5.654	14.156	10	6.92E+01	2.96E+01	1.11E+02			3
337	5.627	13.811	10	1.04E+02	1.33E-02	1.04E+02			3
338	5.888	12.262	10	1.32E+01	0.00E+00	1.32E+01			1
339	5.993	12.248	10	8.40E+00	0.00E+00	8.40E+00			1
340	5.752	12.293	10	2.26E+01	0.00E+00	2.26E+01			1
341	5.706	12.340	10	3.01E+01	0.00E+00	3.01E+01			2
348	6.048	14.515	10	9.41E+00	4.01E+02	5.82E+02			5
349	6.052	12.911	10	5.11E+01	0.00E+00	5.11E+01			2
350	6.039	13.007	10	6.27E+01	0.00E+00	6.27E+01			2
351	5.955	12.889	10	1.04E+02	0.00E+00	1.04E+02			3
352	5.960	12.980	10	1.07E+02	0.00E+00	1.07E+02			3
353	5.884	13.058	10	1.04E+02	0.00E+00	1.04E+02			3
354	5.911	13.172	10	1.11E+02	0.00E+00	1.11E+02			3
355	5.823	13.093	10	1.04E+02	0.00E+00	1.04E+02			3
356	5.820	13.172	10	1.06E+02	0.00E+00	1.06E+02			3
357	6.039	13.482	10	6.87E+01	0.00E+00	6.87E+01			2
358	6.038	13.406	10	6.92E+01	0.00E+00	6.92E+01			2
359	6.041	13.323	10	6.57E+01	0.00E+00	6.57E+01			2
360	6.145	13.753	10	5.74E-01	0.00E+00	5.74E-01			1
362	6.119	13.900	10	2.07E+00	0.00E+00	2.07E+00			1
416	5.798	12.686	7	7.77E+01	0.00E+00	7.77E+01			2
417	5.881	12.714	7	7.90E+01	0.00E+00	7.90E+01			2
420	5.601	12.207	7	8.43E+00	0.00E+00	8.43E+00			1
421	5.517	12.227	7	5.54E+00	0.00E+00	5.54E+00			1
442	5.998	14.225	8	4.82E+01	1.64E+01	7.16E+01			2
443	5.724	13.641	8	1.22E+02	0.00E+00	1.22E+02			3
444	5.772	13.525	8	1.21E+02	0.00E+00	1.21E+02			3
445	5.724	13.585	8	1.24E+02	0.00E+00	1.24E+02			3
446	5.932	13.871	8	1.06E+02	3.24E-01	1.06E+02			3
447	5.920	13.941	8	9.60E+01	1.59E+00	9.83E+01			2
448	5.927	13.817	8	1.07E+02	0.00E+00	1.07E+02			3

Mustard (HD) MRLS
Heavy Attack
Release Height: 15m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
720 rounds at aimpoint (6.15, 18.00)									
1	6.093	14.476	10	2.30E+02	0.00E+00	2.30E+02	6	5	3
2	6.092	14.323	10	2.30E+02	0.00E+00	2.30E+02	6	5	3
3	6.056	14.272	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
4	5.928	14.340	10	2.21E+02	0.00E+00	2.21E+02	6	5	3
5	5.996	14.233	10	2.23E+02	0.00E+00	2.23E+02	6	5	3
6	5.940	14.453	10	2.24E+02	0.00E+00	2.24E+02	6	5	3
7	6.585	14.474	10	1.45E+02	0.00E+00	1.45E+02	5	4	3
8	6.596	14.509	10	1.38E+02	0.00E+00	1.38E+02	5	4	3
9	6.650	14.552	10	9.58E+01	0.00E+00	9.58E+01	4	3	2
10	5.849	14.797	10	2.04E+02	0.00E+00	2.04E+02	6	5	3
11	5.840	14.745	10	2.00E+02	0.00E+00	2.00E+02	6	5	3
12	5.853	14.870	10	2.06E+02	0.00E+00	2.06E+02	6	5	3
26	6.794	15.032	10	8.21E+00	0.00E+00	8.21E+00	2	1	1
27	6.641	15.084	10	1.04E+02	0.00E+00	1.04E+02	5	4	3
30	6.729	15.784	10	2.97E+01	0.00E+00	2.97E+01	2	1	2
31	6.590	15.868	10	1.42E+02	0.00E+00	1.42E+02	5	4	3
32	6.409	15.662	10	1.99E+02	0.00E+00	1.99E+02	6	5	3
33	6.293	15.680	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
34	6.177	16.004	10	2.51E+02	0.00E+00	2.51E+02	6	6	4
35	5.984	15.987	10	2.27E+02	0.00E+00	2.27E+02	6	5	3
36	6.098	15.997	10	2.27E+02	0.00E+00	2.27E+02	6	5	3
40	5.550	13.245	10	3.63E+01	0.00E+00	3.63E+01	2	1	2

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

41	5.474	13.201	10	1.26E+01	0.00E+00	1.26E+01	2	1	1
42	5.507	13.288	10	2.06E+01	0.00E+00	2.06E+01	2	1	1
58	6.946	11.700	10	1.14E+00	0.00E+00	1.14E+00	1	1	1
64	6.971	13.252	10	7.00E-02	0.00E+00	7.00E-02	1	1	1
66	6.985	13.799	10	3.34E-03	0.00E+00	3.34E-03	1	1	1
67	5.560	12.798	10	4.16E+01	0.00E+00	4.16E+01	2	1	2
68	5.483	12.959	10	1.57E+01	0.00E+00	1.57E+01	2	1	1
69	5.563	12.908	10	4.30E+01	0.00E+00	4.30E+01	2	1	2
70	5.463	12.826	10	1.17E+01	0.00E+00	1.17E+01	2	1	1
71	5.648	12.900	10	8.58E+01	0.00E+00	8.58E+01	4	3	2
72	5.451	12.890	10	8.77E+00	0.00E+00	8.77E+00	2	1	1
73	5.605	10.601	10	5.55E+01	0.00E+00	5.55E+01	3	2	2
74	6.419	11.658	10	1.69E+02	0.00E+00	1.69E+02	6	5	3
75	6.278	11.645	10	1.91E+02	0.00E+00	1.91E+02	6	5	3
76	5.720	11.676	10	1.13E+02	0.00E+00	1.13E+02	5	4	3
77	5.601	11.699	10	5.76E+01	0.00E+00	5.76E+01	3	2	2
78	5.331	11.805	10	4.80E-01	0.00E+00	4.80E-01	1	1	1
80	6.177	11.646	10	1.97E+02	0.00E+00	1.97E+02	6	5	3
94	5.423	15.512	10	3.32E-02	0.00E+00	3.32E-02	1	1	1
95	5.601	15.674	10	5.37E+01	0.00E+00	5.37E+01	3	2	2
96	5.747	15.847	10	1.54E+02	0.00E+00	1.54E+02	6	5	3
97	5.610	14.388	10	6.70E+01	0.00E+00	6.70E+01	3	2	2
98	5.554	14.447	10	3.19E+01	0.00E+00	3.19E+01	2	1	2
99	5.616	14.500	10	7.12E+01	0.00E+00	7.12E+01	4	3	2
100	5.667	14.564	10	1.07E+02	0.00E+00	1.07E+02	5	4	3
101	5.392	13.905	10	5.95E-01	0.00E+00	5.95E-01	1	1	1
102	5.474	13.777	10	9.96E+00	0.00E+00	9.96E+00	2	1	1
103	5.406	13.666	10	1.61E+00	0.00E+00	1.61E+00	1	1	1
104	5.461	13.842	10	7.00E+00	0.00E+00	7.00E+00	2	1	1
105	5.476	13.706	10	1.07E+01	0.00E+00	1.07E+01	2	1	1
106	5.642	13.947	10	8.66E+01	0.00E+00	8.66E+01	4	3	2
107	5.653	13.814	10	9.26E+01	0.00E+00	9.26E+01	4	3	2
108	5.627	14.130	10	7.79E+01	0.00E+00	7.79E+01	4	3	2
109	5.702	14.036	10	1.25E+02	0.00E+00	1.25E+02	5	4	3
110	5.702	12.379	10	1.11E+02	0.00E+00	1.11E+02	5	4	3
111	5.784	12.296	10	1.48E+02	0.00E+00	1.48E+02	5	4	3
112	5.875	12.255	10	1.78E+02	0.00E+00	1.78E+02	6	5	3
113	5.966	12.148	10	1.94E+02	0.00E+00	1.94E+02	6	5	3
114	6.916	12.806	10	2.05E+00	0.00E+00	2.05E+00	1	1	1
115	6.830	12.828	10	1.30E+01	0.00E+00	1.30E+01	2	1	1
116	6.756	12.888	10	3.51E+01	0.00E+00	3.51E+01	2	1	2
117	6.725	12.972	10	4.95E+01	0.00E+00	4.95E+01	2	1	2
118	6.694	13.408	10	6.50E+01	0.00E+00	6.50E+01	3	2	2
119	6.704	13.497	10	5.89E+01	0.00E+00	5.89E+01	3	2	2
120	6.033	14.438	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
121	6.032	12.989	10	2.15E+02	0.00E+00	2.15E+02	6	5	3
122	5.929	12.964	10	2.01E+02	0.00E+00	2.01E+02	6	5	3
123	6.033	12.883	10	2.12E+02	0.00E+00	2.12E+02	6	5	3
124	5.934	12.874	10	2.01E+02	0.00E+00	2.01E+02	6	5	3
125	5.888	13.090	10	1.95E+02	0.00E+00	1.95E+02	6	5	3
126	5.793	13.170	10	1.64E+02	0.00E+00	1.64E+02	6	5	3
127	5.789	13.080	10	1.61E+02	0.00E+00	1.61E+02	6	5	3
128	5.929	13.162	10	2.03E+02	0.00E+00	2.03E+02	6	5	3
129	6.018	13.474	10	2.17E+02	0.00E+00	2.17E+02	6	5	3
130	6.010	13.396	10	2.17E+02	0.00E+00	2.17E+02	6	5	3
131	6.016	13.310	10	2.16E+02	0.00E+00	2.16E+02	6	5	3
132	6.074	13.908	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
133	6.062	13.731	10	2.23E+02	0.00E+00	2.23E+02	6	5	3
134	6.072	13.821	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
168	6.948	14.165	7	1.91E-02	0.00E+00	1.91E-02	1	1	1
169	6.942	14.288	7	5.64E-02	0.00E+00	5.64E-02	1	1	1
170	6.850	14.458	7	2.69E+00	0.00E+00	2.69E+00	1	1	1
171	6.764	14.472	7	2.35E+01	0.00E+00	2.35E+01	2	1	1
175	6.863	14.788	7	1.09E+00	0.00E+00	1.09E+00	1	1	1
176	6.271	15.463	7	2.35E+02	0.00E+00	2.35E+02	6	5	3
177	6.321	15.463	7	2.14E+02	0.00E+00	2.14E+02	6	5	3
190	5.817	12.688	7	1.67E+02	0.00E+00	1.67E+02	6	5	3
191	5.850	12.720	7	1.79E+02	0.00E+00	1.79E+02	6	5	3
194	5.504	12.164	7	2.30E+01	0.00E+00	2.30E+01	2	1	1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

195	5.583	12.163	7	5.13E+01	0.00E+00	5.13E+01	3	2	2
200	6.741	13.475	7	3.95E+01	0.00E+00	3.95E+01	2	1	2
201	6.796	13.214	7	1.93E+01	0.00E+00	1.93E+01	2	1	1
202	6.778	13.317	7	2.54E+01	0.00E+00	2.54E+01	2	1	2
203	6.788	13.359	7	2.15E+01	0.00E+00	2.15E+01	2	1	1
206	6.739	13.622	7	3.99E+01	0.00E+00	3.99E+01	2	1	2
207	6.879	13.872	7	2.59E+00	0.00E+00	2.59E+00	1	1	1
210	5.928	14.339	8	2.20E+02	0.00E+00	2.20E+02	6	5	3
211	5.764	13.557	8	1.54E+02	0.00E+00	1.54E+02	6	5	3
212	5.766	13.622	8	1.55E+02	0.00E+00	1.55E+02	6	5	3
213	5.767	13.674	8	1.56E+02	0.00E+00	1.56E+02	6	5	3
214	5.958	13.839	8	2.17E+02	0.00E+00	2.17E+02	6	5	3
215	5.913	13.903	8	2.12E+02	0.00E+00	2.12E+02	6	5	3
216	5.912	13.851	8	2.11E+02	0.00E+00	2.11E+02	6	5	3
231	5.991	14.398	10	2.24E+02	0.00E+00	2.24E+02	6	5	3
232	6.000	14.484	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
233	6.059	14.191	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
234	6.048	14.352	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
235	5.928	14.253	10	2.19E+02	0.00E+00	2.19E+02	6	5	3
236	5.995	14.318	10	2.24E+02	0.00E+00	2.24E+02	6	5	3
237	6.729	14.564	10	4.03E+01	0.00E+00	4.03E+01	2	1	2
238	6.663	14.478	10	8.60E+01	0.00E+00	8.60E+01	4	3	2
239	6.637	14.483	10	1.06E+02	0.00E+00	1.06E+02	5	4	3
240	5.917	14.848	10	2.26E+02	0.00E+00	2.26E+02	6	5	3
241	5.911	14.774	10	2.24E+02	0.00E+00	2.24E+02	6	5	3
242	5.917	14.700	10	2.24E+02	0.00E+00	2.24E+02	6	5	3
255	6.893	14.961	10	1.40E-01	0.00E+00	1.40E-01	1	1	1
256	6.712	15.037	10	4.77E+01	0.00E+00	4.77E+01	2	1	2
257	6.799	14.963	10	7.07E+00	0.00E+00	7.07E+00	2	1	1
259	6.679	15.833	10	7.34E+01	0.00E+00	7.34E+01	4	3	2
260	6.524	15.940	10	1.98E+02	0.00E+00	1.98E+02	6	5	3
261	6.241	15.673	10	2.48E+02	0.00E+00	2.48E+02	6	5	3
262	6.476	15.623	10	2.06E+02	0.00E+00	2.06E+02	6	5	3
263	6.334	15.995	10	2.05E+02	0.00E+00	2.05E+02	6	5	3
264	6.044	15.980	10	2.16E+02	0.00E+00	2.16E+02	6	5	3
265	6.660	15.900	10	9.35E+01	0.00E+00	9.35E+01	4	3	2
269	5.451	13.254	10	7.33E+00	0.00E+00	7.33E+00	2	1	1
270	5.514	13.209	10	2.34E+01	0.00E+00	2.34E+01	2	1	1
271	5.566	13.193	10	4.40E+01	0.00E+00	4.40E+01	2	1	2
291	6.927	13.730	10	5.00E-01	0.00E+00	5.00E-01	1	1	1
295	5.413	12.882	10	3.99E+00	0.00E+00	3.99E+00	1	1	1
296	5.537	12.816	10	3.27E+01	0.00E+00	3.27E+01	2	1	2
297	5.496	12.799	10	1.91E+01	0.00E+00	1.91E+01	2	1	1
298	5.561	12.909	10	4.21E+01	0.00E+00	4.21E+01	2	1	2
299	5.615	12.839	10	6.76E+01	0.00E+00	6.76E+01	3	2	2
300	5.608	12.984	10	6.44E+01	0.00E+00	6.44E+01	3	2	2
302	6.396	11.688	10	1.75E+02	0.00E+00	1.75E+02	6	5	3
303	6.276	11.651	10	1.91E+02	0.00E+00	1.91E+02	6	5	3
304	5.755	11.682	10	1.29E+02	0.00E+00	1.29E+02	5	4	3
305	5.635	11.734	10	7.33E+01	0.00E+00	7.33E+01	4	3	2
306	5.353	11.802	10	9.69E-01	0.00E+00	9.69E-01	1	1	1
323	5.639	15.789	10	9.47E+01	0.00E+00	9.47E+01	4	3	2
324	5.484	15.661	10	1.12E+00	0.00E+00	1.12E+00	1	1	1
325	5.702	14.442	10	1.29E+02	0.00E+00	1.29E+02	5	4	3
326	5.689	14.515	10	1.21E+02	0.00E+00	1.21E+02	5	4	3
327	5.512	14.539	10	1.45E+01	0.00E+00	1.45E+01	2	1	1
328	5.636	14.371	10	8.51E+01	0.00E+00	8.51E+01	4	3	2
329	5.419	13.723	10	2.59E+00	0.00E+00	2.59E+00	1	1	1
330	5.408	13.795	10	1.51E+00	0.00E+00	1.51E+00	1	1	1
331	5.493	13.630	10	1.47E+01	0.00E+00	1.47E+01	2	1	1
332	5.361	13.699	10	2.39E-01	0.00E+00	2.39E-01	1	1	1
333	5.363	13.843	10	2.06E-01	0.00E+00	2.06E-01	1	1	1
334	5.691	13.943	10	1.17E+02	0.00E+00	1.17E+02	5	4	3
335	5.690	14.073	10	1.18E+02	0.00E+00	1.18E+02	5	4	3
336	5.654	14.156	10	9.60E+01	0.00E+00	9.60E+01	4	3	2
337	5.627	13.811	10	7.65E+01	0.00E+00	7.65E+01	4	3	2
338	5.888	12.262	10	1.81E+02	0.00E+00	1.81E+02	6	5	3
339	5.993	12.248	10	1.99E+02	0.00E+00	1.99E+02	6	5	3
340	5.752	12.293	10	1.34E+02	0.00E+00	1.34E+02	5	4	3

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

341	5.706	12.340	10	1.12E+02	0.00E+00	1.12E+02	5	4	3
342	6.849	12.996	10	8.38E+00	0.00E+00	8.38E+00	2	1	1
343	6.900	12.944	10	2.56E+00	0.00E+00	2.56E+00	1	1	1
344	6.866	12.886	10	6.63E+00	0.00E+00	6.63E+00	2	1	1
345	6.785	13.015	10	2.42E+01	0.00E+00	2.42E+01	2	1	1
346	6.814	13.529	10	1.36E+01	0.00E+00	1.36E+01	2	1	1
347	6.740	13.527	10	3.98E+01	0.00E+00	3.98E+01	2	1	2
348	6.048	14.515	10	2.25E+02	0.00E+00	2.25E+02	6	5	3
349	6.052	12.911	10	2.15E+02	0.00E+00	2.15E+02	6	5	3
350	6.039	13.007	10	2.16E+02	0.00E+00	2.16E+02	6	5	3
351	5.955	12.889	10	2.04E+02	0.00E+00	2.04E+02	6	5	3
352	5.960	12.980	10	2.06E+02	0.00E+00	2.06E+02	6	5	3
353	5.884	13.058	10	1.94E+02	0.00E+00	1.94E+02	6	5	3
354	5.911	13.172	10	2.01E+02	0.00E+00	2.01E+02	6	5	3
355	5.823	13.093	10	1.75E+02	0.00E+00	1.75E+02	6	5	3
356	5.820	13.172	10	1.74E+02	0.00E+00	1.74E+02	6	5	3
357	6.039	13.482	10	2.19E+02	0.00E+00	2.19E+02	6	5	3
358	6.038	13.406	10	2.18E+02	0.00E+00	2.18E+02	6	5	3
359	6.041	13.323	10	2.17E+02	0.00E+00	2.17E+02	6	5	3
360	6.145	13.753	10	2.31E+02	0.00E+00	2.31E+02	6	5	3
361	6.165	13.823	10	2.33E+02	0.00E+00	2.33E+02	6	5	3
362	6.119	13.900	10	2.30E+02	0.00E+00	2.30E+02	6	5	3
398	6.862	14.468	7	2.07E+00	0.00E+00	2.07E+00	1	1	1
399	6.809	14.467	7	9.23E+00	0.00E+00	9.23E+00	2	1	1
402	6.871	14.784	7	8.72E-01	0.00E+00	8.72E-01	1	1	1
404	6.339	15.451	7	2.08E+02	0.00E+00	2.08E+02	6	5	3
405	6.245	15.441	7	2.45E+02	0.00E+00	2.45E+02	6	5	3
416	5.798	12.686	7	1.60E+02	0.00E+00	1.60E+02	6	5	3
417	5.881	12.714	7	1.87E+02	0.00E+00	1.87E+02	6	5	3
420	5.601	12.207	7	5.90E+01	0.00E+00	5.90E+01	3	2	2
421	5.517	12.227	7	2.70E+01	0.00E+00	2.70E+01	2	1	2
426	6.795	13.441	7	1.86E+01	0.00E+00	1.86E+01	2	1	1
427	6.756	13.385	7	3.30E+01	0.00E+00	3.30E+01	2	1	2
428	6.744	13.296	7	3.87E+01	0.00E+00	3.87E+01	2	1	2
429	6.741	13.225	7	4.04E+01	0.00E+00	4.04E+01	2	1	2
432	6.970	13.918	7	2.71E-03	0.00E+00	2.71E-03	1	1	1
433	6.824	14.074	7	8.94E+00	0.00E+00	8.94E+00	2	1	1
442	5.998	14.225	8	2.23E+02	0.00E+00	2.23E+02	6	5	3
443	5.724	13.641	8	1.33E+02	0.00E+00	1.33E+02	5	4	3
444	5.772	13.525	8	1.57E+02	0.00E+00	1.57E+02	6	5	3
445	5.724	13.585	8	1.33E+02	0.00E+00	1.33E+02	5	4	3
446	5.932	13.871	8	2.14E+02	0.00E+00	2.14E+02	6	5	3
447	5.920	13.941	8	2.13E+02	0.00E+00	2.13E+02	6	5	3
448	5.927	13.817	8	2.13E+02	0.00E+00	2.13E+02	6	5	3

**Case 2a: Protected (Eye,
Respiratory Exposure)**

720 rounds at aimpoint (5.55, 15.15)									
1	6.093	14.476	10	8.19E-01	3.15E+01	8.19E-01	1	1	
2	6.092	14.323	10	1.51E+00	3.45E+00	1.51E+00	1	1	
3	6.056	14.272	10	1.65E+00	5.92E+00	1.65E+00	1	1	
4	5.928	14.340	10	1.46E+00	5.91E+01	1.46E+00	1	1	
5	5.996	14.233	10	5.85E-01	1.12E+02	5.85E-01	1	1	
6	5.940	14.453	10	1.04E+00	7.27E+01	1.04E+00	1	1	
10	5.849	14.797	10	1.26E+00	1.26E+01	1.26E+00	1	1	
11	5.840	14.745	10	1.29E+00	5.91E+01	1.29E+00	1	1	
12	5.853	14.870	10	7.07E-01	2.63E+01	7.07E-01	1	1	
97	5.610	14.388	10	2.63E+00	1.22E+02	2.63E+00	1	1	
98	5.554	14.447	10	4.01E+00	6.66E+01	4.01E+00	1	1	
99	5.616	14.500	10	1.62E+00	2.00E+02	1.62E+00	1	1	
100	5.667	14.564	10	2.86E-01	7.46E+01	2.86E-01	1	1	
101	5.392	13.905	10	1.99E+00	2.03E+01	1.99E+00	1	1	
102	5.474	13.777	10	1.71E+00	1.69E+00	1.71E+00	1	1	
103	5.406	13.666	10	7.17E-01	0.00E+00	7.17E-01	1	1	
104	5.461	13.842	10	1.79E+00	2.82E+00	1.79E+00	1	1	
105	5.476	13.706	10	1.51E+00	9.86E-02	1.51E+00	1	1	
106	5.642	13.947	10	1.17E+00	2.57E+00	1.17E+00	1	1	
107	5.653	13.814	10	2.29E-01	0.00E+00	2.29E-01	1	1	
108	5.627	14.130	10	2.16E+00	1.46E+01	2.16E+00	1	1	
109	5.702	14.036	10	1.56E-02	2.22E-02	1.56E-02	1	1	
120	6.033	14.438	10	1.06E+00	5.81E+01	1.06E+00	1	1	
132	6.074	13.908	10	5.43E-01	9.44E-02	5.43E-01	1	1	

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

133	6.062	13.731	10	6.97E-01	0.00E+00	6.97E-01	1	1	
134	6.072	13.821	10	5.75E-01	0.00E+00	5.75E-01	1	1	
198	5.102	14.383	7	3.75E-02	9.10E-01	3.75E-02	1	1	
199	5.115	14.389	7	1.31E-01	5.28E+00	1.31E-01	1	1	
210	5.928	14.339	8	1.46E+00	5.86E+01	1.46E+00	1	1	
211	5.764	13.557	8	3.09E-01	0.00E+00	3.09E-01	1	1	
212	5.766	13.622	8	4.80E-01	0.00E+00	4.80E-01	1	1	
213	5.767	13.674	8	5.97E-01	0.00E+00	5.97E-01	1	1	
214	5.958	13.839	8	4.02E-01	0.00E+00	4.02E-01	1	1	
215	5.913	13.903	8	2.77E+00	4.50E-01	2.77E+00	1	1	
216	5.912	13.851	8	2.27E+00	5.26E-02	2.27E+00	1	1	
231	5.991	14.398	10	3.74E-01	7.81E+00	3.74E-01	1	1	
232	6.000	14.484	10	3.78E-01	2.66E-04	3.78E-01	1	1	
233	6.059	14.191	10	1.11E+00	3.55E-01	1.11E+00	1	1	
234	6.048	14.352	10	2.10E+00	3.49E+01	2.10E+00	1	1	
235	5.928	14.253	10	1.64E+00	6.75E+01	1.64E+00	1	1	
236	5.995	14.318	10	3.30E-01	2.45E+02	3.30E-01	1	1	
240	5.917	14.848	10	2.04E-01	3.84E+01	2.04E-01	1	1	
241	5.911	14.774	10	2.12E-01	2.05E+01	2.12E-01	1	1	
242	5.917	14.700	10	3.96E-01	2.27E+01	3.96E-01	1	1	
325	5.702	14.442	10	1.14E+00	3.90E+00	1.14E+00	1	1	
326	5.689	14.515	10	7.01E-01	2.86E+01	7.01E-01	1	1	
327	5.512	14.539	10	2.01E+00	4.82E+01	2.01E+00	1	1	
328	5.636	14.371	10	2.16E+00	9.07E+01	2.16E+00	1	1	
329	5.419	13.723	10	1.42E+00	5.83E-02	1.42E+00	1	1	
330	5.408	13.795	10	1.47E+00	1.83E-01	1.47E+00	1	1	
331	5.493	13.630	10	5.86E-01	0.00E+00	5.86E-01	1	1	
332	5.361	13.699	10	9.54E-01	0.00E+00	9.54E-01	1	1	
333	5.363	13.843	10	1.06E+00	3.61E+00	1.06E+00	1	1	
334	5.691	13.943	10	1.30E-01	2.39E-01	1.30E-01	1	1	
335	5.690	14.073	10	9.19E-02	8.17E-01	9.19E-02	1	1	
336	5.654	14.156	10	3.10E-01	6.49E+00	3.10E-01	1	1	
337	5.627	13.811	10	1.65E+00	1.20E+00	1.65E+00	1	1	
348	6.048	14.515	10	7.79E-01	1.14E+02	7.79E-01	1	1	
424	5.069	14.379	7	5.89E-01	5.10E-02	5.89E-01	1	1	
425	5.100	14.393	7	2.93E-02	1.33E-02	2.93E-02	1	1	
442	5.998	14.225	8	6.09E-01	1.03E+02	6.09E-01	1	1	
443	5.724	13.641	8	2.80E-01	0.00E+00	2.80E-01	1	1	
444	5.772	13.525	8	3.16E-01	0.00E+00	3.16E-01	1	1	
445	5.724	13.585	8	1.57E-01	0.00E+00	1.57E-01	1	1	
446	5.932	13.871	8	1.51E+00	1.01E-01	1.51E+00	1	1	
447	5.920	13.941	8	2.75E+00	5.32E-01	2.75E+00	1	1	
448	5.927	13.817	8	1.30E+00	9.18E-03	1.30E+00	1	1	

Case 2b: Protected (Skin Exposure)

720 rounds at aimpoint (5.55, 15.15)									
1	6.093	14.476	10	7.50E+00	4.07E+02	5.89E+02			5
2	6.092	14.323	10	1.77E+01	6.30E+01	1.08E+02			3
3	6.056	14.272	10	2.87E+01	4.50E+01	9.30E+01			2
4	5.928	14.340	10	3.86E+01	3.45E+02	5.31E+02			5
5	5.996	14.233	10	2.16E+01	4.23E+02	6.26E+02			5
6	5.940	14.453	10	2.94E+01	5.43E+02	8.05E+02			6
10	5.849	14.797	10	5.87E+00	3.10E+02	4.49E+02			4
11	5.840	14.745	10	6.68E+00	3.64E+02	5.27E+02			5
12	5.853	14.870	10	3.23E+00	5.83E+02	8.36E+02			6
40	5.550	13.245	10	5.50E+01	0.00E+00	5.50E+01			2
41	5.474	13.201	10	5.84E+01	0.00E+00	5.84E+01			2
42	5.507	13.288	10	7.00E+01	0.00E+00	7.00E+01			2
67	5.560	12.798	10	2.98E+01	0.00E+00	2.98E+01			2
68	5.483	12.959	10	4.13E+01	0.00E+00	4.13E+01			2
69	5.563	12.908	10	3.97E+01	0.00E+00	3.97E+01			2
70	5.463	12.826	10	2.58E+01	0.00E+00	2.58E+01			2
71	5.648	12.900	10	3.45E+01	0.00E+00	3.45E+01			2
72	5.451	12.890	10	2.94E+01	0.00E+00	2.94E+01			2
78	5.331	11.805	10	1.27E-02	0.00E+00	1.27E-02			1
81	5.121	11.999	10	4.24E-02	0.00E+00	4.24E-02			1
97	5.610	14.388	10	3.53E+01	5.93E+02	8.82E+02			6
98	5.554	14.447	10	3.21E+01	2.74E+02	4.24E+02			4
99	5.616	14.500	10	2.66E+01	6.23E+02	9.17E+02			6
100	5.667	14.564	10	1.83E+01	4.60E+02	6.75E+02			5
101	5.392	13.905	10	6.81E+01	8.06E+01	1.83E+02			3

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

102	5.474	13.777	10	7.45E+01	1.23E+01	9.21E+01			2
103	5.406	13.666	10	7.44E+01	3.28E+00	7.91E+01			2
104	5.461	13.842	10	7.09E+01	1.64E+01	9.43E+01			2
105	5.476	13.706	10	7.65E+01	3.28E+00	8.12E+01			2
106	5.642	13.947	10	7.52E+01	5.85E+01	1.59E+02			3
107	5.653	13.814	10	7.57E+01	8.27E+00	8.75E+01			2
108	5.627	14.130	10	5.51E+01	3.61E+02	5.71E+02			5
109	5.702	14.036	10	7.21E+01	1.00E+02	2.15E+02			3
110	5.702	12.379	10	6.19E+00	0.00E+00	6.19E+00			1
111	5.784	12.296	10	7.61E+00	0.00E+00	7.61E+00			1
112	5.875	12.255	10	5.51E+00	0.00E+00	5.51E+00			1
113	5.966	12.148	10	9.87E-01	0.00E+00	9.87E-01			1
120	6.033	14.438	10	1.46E+01	2.15E+02	3.22E+02			4
121	6.032	12.989	10	2.93E+01	0.00E+00	2.93E+01			2
122	5.929	12.964	10	3.81E+01	0.00E+00	3.81E+01			2
123	6.033	12.883	10	2.30E+01	0.00E+00	2.30E+01			1
124	5.934	12.874	10	3.13E+01	0.00E+00	3.13E+01			2
125	5.888	13.090	10	5.01E+01	0.00E+00	5.01E+01			2
126	5.793	13.170	10	4.14E+01	0.00E+00	4.14E+01			2
127	5.789	13.080	10	3.67E+01	0.00E+00	3.67E+01			2
128	5.929	13.162	10	5.11E+01	0.00E+00	5.11E+01			2
129	6.018	13.474	10	4.35E+01	0.00E+00	4.35E+01			2
130	6.010	13.396	10	4.04E+01	0.00E+00	4.04E+01			2
131	6.016	13.310	10	3.97E+01	0.00E+00	3.97E+01			2
132	6.074	13.908	10	3.63E+01	6.34E-01	3.72E+01			2
133	6.062	13.731	10	4.13E+01	0.00E+00	4.13E+01			2
134	6.072	13.821	10	3.62E+01	0.00E+00	3.62E+01			2
189	5.211	12.855	7	2.53E+01	0.00E+00	2.53E+01			2
190	5.817	12.688	7	2.15E+01	0.00E+00	2.15E+01			1
191	5.850	12.720	7	2.21E+01	0.00E+00	2.21E+01			1
192	5.199	13.137	7	3.79E+01	0.00E+00	3.79E+01			2
193	5.224	13.195	7	4.27E+01	0.00E+00	4.27E+01			2
194	5.504	12.164	7	6.75E+00	0.00E+00	6.75E+00			1
195	5.583	12.163	7	6.32E+00	0.00E+00	6.32E+00			1
196	4.968	13.187	7	5.47E+00	0.00E+00	5.47E+00			1
197	5.033	13.123	7	1.54E+01	0.00E+00	1.54E+01			1
198	5.102	14.383	7	1.93E+01	1.01E+03	1.46E+03			6
199	5.115	14.389	7	2.08E+01	8.13E+02	1.18E+03			6
210	5.928	14.339	8	3.87E+01	3.42E+02	5.27E+02			5
211	5.764	13.557	8	4.82E+01	0.00E+00	4.82E+01			2
212	5.766	13.622	8	4.87E+01	4.62E-02	4.88E+01			2
213	5.767	13.674	8	4.89E+01	4.93E-01	4.96E+01			2
214	5.958	13.839	8	7.44E+01	2.66E+00	7.82E+01			2
215	5.913	13.903	8	8.21E+01	2.16E+01	1.13E+02			3
216	5.912	13.851	8	8.36E+01	1.01E+01	9.80E+01			2
231	5.991	14.398	10	1.73E+01	9.52E+01	1.53E+02			3
232	6.000	14.484	10	1.03E+01	6.84E+01	1.08E+02			3
233	6.059	14.191	10	3.44E+01	1.79E+01	6.00E+01			2
234	6.048	14.352	10	2.31E+01	1.65E+02	2.59E+02			4
235	5.928	14.253	10	4.97E+01	5.85E+02	8.85E+02			6
236	5.995	14.318	10	1.85E+01	7.25E+02	1.05E+03			6
240	5.917	14.848	10	1.57E+00	1.83E+02	2.63E+02			4
241	5.911	14.774	10	1.84E+00	4.12E+02	5.90E+02			5
242	5.917	14.700	10	5.27E+00	3.19E+02	4.61E+02			4
269	5.451	13.254	10	5.43E+01	0.00E+00	5.43E+01			2
270	5.514	13.209	10	6.46E+01	0.00E+00	6.46E+01			2
271	5.566	13.193	10	5.67E+01	0.00E+00	5.67E+01			2
295	5.413	12.882	10	3.00E+01	0.00E+00	3.00E+01			2
296	5.537	12.816	10	2.92E+01	0.00E+00	2.92E+01			2
297	5.496	12.799	10	2.50E+01	0.00E+00	2.50E+01			2
298	5.561	12.909	10	3.95E+01	0.00E+00	3.95E+01			2
299	5.615	12.839	10	3.64E+01	0.00E+00	3.64E+01			2
300	5.608	12.984	10	4.82E+01	0.00E+00	4.82E+01			2
306	5.353	11.802	10	2.02E-02	0.00E+00	2.02E-02			1
309	5.181	11.974	10	1.65E-02	0.00E+00	1.65E-02			1
321	5.097	15.098	10	7.86E-04	0.00E+00	7.86E-04			1
325	5.702	14.442	10	4.64E+01	4.93E+02	7.51E+02			6
326	5.689	14.515	10	3.48E+01	6.30E+02	9.35E+02			6
327	5.512	14.539	10	2.12E+01	2.04E+02	3.13E+02			4

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

328	5.636	14.371	10	2.80E+01	6.32E+02	9.31E+02			6
329	5.419	13.723	10	7.54E+01	5.88E+00	8.38E+01			2
330	5.408	13.795	10	7.35E+01	1.99E+01	1.02E+02			3
331	5.493	13.630	10	7.84E+01	1.32E+00	8.03E+01			2
332	5.361	13.699	10	6.74E+01	1.33E+00	6.93E+01			2
333	5.363	13.843	10	6.94E+01	1.47E+01	9.04E+01			2
334	5.691	13.943	10	7.87E+01	3.95E+01	1.35E+02			3
335	5.690	14.073	10	6.86E+01	1.79E+02	3.24E+02			4
336	5.654	14.156	10	5.06E+01	5.81E+02	8.81E+02			6
337	5.627	13.811	10	7.73E+01	9.20E+00	9.04E+01			2
338	5.888	12.262	10	5.61E+00	0.00E+00	5.61E+00			1
339	5.993	12.248	10	2.98E+00	0.00E+00	2.98E+00			1
340	5.752	12.293	10	6.77E+00	0.00E+00	6.77E+00			1
341	5.706	12.340	10	5.78E+00	0.00E+00	5.78E+00			1
348	6.048	14.515	10	9.56E+00	4.12E+02	5.98E+02			5
349	6.052	12.911	10	2.35E+01	0.00E+00	2.35E+01			1
350	6.039	13.007	10	3.02E+01	0.00E+00	3.02E+01			2
351	5.955	12.889	10	2.97E+01	0.00E+00	2.97E+01			2
352	5.960	12.980	10	3.48E+01	0.00E+00	3.48E+01			2
353	5.884	13.058	10	4.76E+01	0.00E+00	4.76E+01			2
354	5.911	13.172	10	5.46E+01	0.00E+00	5.46E+01			2
355	5.823	13.093	10	4.24E+01	0.00E+00	4.24E+01			2
356	5.820	13.172	10	4.64E+01	0.00E+00	4.64E+01			2
357	6.039	13.482	10	4.70E+01	0.00E+00	4.70E+01			2
358	6.038	13.406	10	4.48E+01	0.00E+00	4.48E+01			2
359	6.041	13.323	10	4.30E+01	0.00E+00	4.30E+01			2
360	6.145	13.753	10	2.50E+00	0.00E+00	2.50E+00			1
361	6.165	13.823	10	3.33E-01	0.00E+00	3.33E-01			1
362	6.119	13.900	10	1.36E+01	0.00E+00	1.36E+01			1
416	5.798	12.686	7	2.14E+01	0.00E+00	2.14E+01			1
417	5.881	12.714	7	2.38E+01	0.00E+00	2.38E+01			1
418	5.228	13.115	7	3.92E+01	0.00E+00	3.92E+01			2
419	5.264	13.099	7	4.19E+01	0.00E+00	4.19E+01			2
420	5.601	12.207	7	7.42E+00	0.00E+00	7.42E+00			1
421	5.517	12.227	7	8.20E+00	0.00E+00	8.20E+00			1
422	4.992	13.086	7	8.31E+00	0.00E+00	8.31E+00			1
423	4.962	13.219	7	4.63E+00	0.00E+00	4.63E+00			1
424	5.069	14.379	7	1.01E+01	4.08E+02	5.93E+02			5
425	5.100	14.393	7	1.82E+01	1.15E+03	1.66E+03			7
439	5.211	12.851	8	2.52E+01	0.00E+00	2.52E+01			2
442	5.998	14.225	8	2.05E+01	3.86E+02	5.72E+02			5
443	5.724	13.641	8	6.14E+01	6.08E-02	6.15E+01			2
444	5.772	13.525	8	4.95E+01	0.00E+00	4.95E+01			2
445	5.724	13.585	8	6.05E+01	0.00E+00	6.05E+01			2
446	5.932	13.871	8	8.19E+01	9.84E+00	9.60E+01			2
447	5.920	13.941	8	8.05E+01	3.29E+01	1.28E+02			3
448	5.927	13.817	8	8.39E+01	4.54E+00	9.04E+01			2

Mustard (HD) 250kg Bomb
Light Attack
Release Height: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (5.50, 14.20)									
40	5.550	13.245	10	0.00E+00	4.75E-01	6.79E-01	1	1	1
41	5.474	13.201	10	0.00E+00	4.31E-01	6.16E-01	1	1	1
42	5.507	13.288	10	0.00E+00	6.41E-01	9.16E-01	1	1	1
101	5.392	13.905	10	9.56E+02	1.39E+03	2.94E+03	6	6	7
102	5.474	13.777	10	5.00E-02	1.25E+00	1.84E+00	1	1	1
103	5.406	13.666	10	9.94E+00	9.45E+01	1.45E+02	2	1	3
104	5.461	13.842	10	2.70E-01	4.96E+00	7.36E+00	1	1	1
105	5.476	13.706	10	4.74E-04	2.08E+00	2.97E+00	1	1	1
106	5.642	13.947	10	9.65E+02	2.39E+03	4.38E+03	6	6	8
107	5.653	13.814	10	4.37E+02	5.26E+02	1.19E+03	6	6	6
108	5.627	14.130	10	1.37E+02	1.10E+03	1.71E+03	5	4	7
109	5.702	14.036	10	4.17E-03	0.00E+00	4.17E-03	1	1	1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

211	5.764	13.557	8	0.00E+00	4.50E-01	6.43E-01	1	1	1
212	5.766	13.622	8	0.00E+00	1.88E-01	2.69E-01	1	1	1
213	5.767	13.674	8	0.00E+00	6.54E-02	9.34E-02	1	1	1
269	5.451	13.254	10	0.00E+00	1.23E+00	1.76E+00	1	1	1
270	5.514	13.209	10	0.00E+00	2.87E-01	4.10E-01	1	1	1
271	5.566	13.193	10	0.00E+00	3.28E-01	4.69E-01	1	1	1
329	5.419	13.723	10	2.09E+01	1.30E+02	2.07E+02	2	1	3
330	5.408	13.795	10	2.23E+02	3.70E+02	7.52E+02	6	5	6
331	5.493	13.630	10	1.49E-04	1.56E+00	2.23E+00	1	1	1
332	5.361	13.699	10	4.58E+00	5.36E+01	8.12E+01	1	1	2
333	5.363	13.843	10	2.89E+01	1.37E+02	2.25E+02	2	1	3
334	5.691	13.943	10	2.42E+01	1.11E+02	1.83E+02	2	1	3
335	5.690	14.073	10	8.77E+00	7.56E+01	1.17E+02	2	1	3
336	5.654	14.156	10	7.28E+02	1.97E+03	3.54E+03	6	6	7
337	5.627	13.811	10	7.32E+01	2.40E+02	4.16E+02	4	3	4
443	5.724	13.641	8	5.96E-02	4.51E+00	6.50E+00	1	1	1
444	5.772	13.525	8	0.00E+00	2.31E-01	3.30E-01	1	1	1
445	5.724	13.585	8	4.80E-02	5.32E+00	7.65E+00	1	1	1

Case 2a: Protected (Eye,
Respiratory Exposure)

2 rounds at aimpoint (5.65, 13.35)

40	5.550	13.245	10	1.77E-05	3.54E-01	1.77E-05	1	1	
67	5.560	12.798	10	4.31E-01	6.98E+01	4.31E-01	1	1	
68	5.483	12.959	10	3.49E-05	1.87E-01	3.49E-05	1	1	
69	5.563	12.908	10	3.96E+00	2.08E+02	3.96E+00	1	1	
70	5.463	12.826	10	0.00E+00	9.68E-02	0.00E+00	1	1	
110	5.702	12.379	10	0.00E+00	2.95E-01	0.00E+00	1	1	
111	5.784	12.296	10	0.00E+00	4.81E-01	0.00E+00	1	1	
112	5.875	12.255	10	0.00E+00	1.47E-01	0.00E+00	1	1	
126	5.793	13.170	10	3.64E+00	3.79E+03	3.64E+00	1	1	
127	5.789	13.080	10	1.11E+01	2.00E+03	1.11E+01	2	1	
190	5.817	12.688	7	6.83E-02	2.15E+01	6.83E-02	1	1	
191	5.850	12.720	7	3.84E-05	7.39E+00	3.84E-05	1	1	
194	5.504	12.164	7	0.00E+00	3.26E-02	0.00E+00	1	1	
195	5.583	12.163	7	0.00E+00	4.34E-02	0.00E+00	1	1	
270	5.514	13.209	10	3.86E-05	2.84E+00	3.86E-05	1	1	
271	5.566	13.193	10	5.14E-01	7.73E+02	5.14E-01	1	1	
296	5.537	12.816	10	6.52E-01	7.85E+01	6.52E-01	1	1	
297	5.496	12.799	10	6.11E-05	6.03E+00	6.11E-05	1	1	
298	5.561	12.909	10	4.61E+00	2.30E+02	4.61E+00	1	1	
299	5.615	12.839	10	3.98E-05	2.32E+00	3.98E-05	1	1	
300	5.608	12.984	10	5.94E-05	1.27E-01	5.94E-05	1	1	
338	5.888	12.262	10	0.00E+00	1.27E-01	0.00E+00	1	1	
340	5.752	12.293	10	0.00E+00	3.59E-01	0.00E+00	1	1	
341	5.706	12.340	10	0.00E+00	2.61E-01	0.00E+00	1	1	
355	5.823	13.093	10	1.56E+00	3.93E+02	1.56E+00	1	1	
356	5.820	13.172	10	9.30E-01	1.06E+03	9.30E-01	1	1	
416	5.798	12.686	7	1.12E-01	2.58E+01	1.12E-01	1	1	
417	5.881	12.714	7	0.00E+00	8.76E-01	0.00E+00	1	1	
420	5.601	12.207	7	0.00E+00	9.67E-02	0.00E+00	1	1	
421	5.517	12.227	7	0.00E+00	1.66E-01	0.00E+00	1	1	

Case 2b: Protected (Skin
Exposure)

2 rounds at aimpoint (5.65, 13.35)

40	5.550	13.245	10	5.25E-03	1.01E+00	1.45E+00			1
67	5.560	12.798	10	8.57E+00	2.00E+02	2.94E+02			4
68	5.483	12.959	10	1.22E-03	5.34E-01	7.64E-01			1
69	5.563	12.908	10	7.94E+01	5.94E+02	9.28E+02			6
70	5.463	12.826	10	4.55E-05	2.77E-01	3.96E-01			1
72	5.451	12.890	10	9.52E-07	0.00E+00	9.52E-07			1
110	5.702	12.379	10	0.00E+00	8.44E-01	1.21E+00			1
111	5.784	12.296	10	0.00E+00	1.38E+00	1.97E+00			1
112	5.875	12.255	10	0.00E+00	4.19E-01	5.99E-01			1
126	5.793	13.170	10	4.75E+01	1.08E+04	1.55E+04			9
127	5.789	13.080	10	1.10E+02	5.73E+03	8.30E+03			8
190	5.817	12.688	7	1.73E+00	6.16E+01	8.97E+01			2
191	5.850	12.720	7	4.54E-01	2.11E+01	3.06E+01			2
194	5.504	12.164	7	0.00E+00	9.34E-02	1.33E-01			1
195	5.583	12.163	7	0.00E+00	1.24E-01	1.77E-01			1
270	5.514	13.209	10	1.43E-03	8.13E+00	1.16E+01			1
271	5.566	13.193	10	7.39E+00	2.21E+03	3.16E+03			7
296	5.537	12.816	10	1.60E+01	2.24E+02	3.36E+02			4
297	5.496	12.799	10	2.37E-01	1.72E+01	2.48E+01			1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

298	5.561	12.909	10	9.19E+01	6.57E+02	1.03E+03			6
299	5.615	12.839	10	6.93E-02	6.64E+00	9.56E+00			1
300	5.608	12.984	10	1.46E-03	3.62E-01	5.19E-01			1
338	5.888	12.262	10	0.00E+00	3.62E-01	5.17E-01			1
340	5.752	12.293	10	0.00E+00	1.03E+00	1.47E+00			1
341	5.706	12.340	10	0.00E+00	7.46E-01	1.07E+00			1
355	5.823	13.093	10	1.63E+01	1.12E+03	1.62E+03			7
356	5.820	13.172	10	1.26E+01	3.03E+03	4.34E+03			8
416	5.798	12.686	7	2.42E+00	7.38E+01	1.08E+02			3
417	5.881	12.714	7	1.11E-04	2.51E+00	3.59E+00			1
420	5.601	12.207	7	0.00E+00	2.77E-01	3.96E-01			1
421	5.517	12.227	7	0.00E+00	4.75E-01	6.79E-01			1

Mustard (HD) 250kg Bomb
Moderate Attack
Release Height: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
12 rounds at aimpoint (5.65, 13.25)									
40	5.550	13.245	10	1.11E+02	6.10E+00	1.20E+02	5	4	3
41	5.474	13.201	10	5.93E+01	2.51E+02	4.18E+02	3	2	4
67	5.560	12.798	10	5.85E+01	2.50E+02	4.16E+02	3	2	4
68	5.483	12.959	10	4.55E+02	2.62E+03	4.20E+03	6	6	8
69	5.563	12.908	10	4.64E+02	6.28E+02	1.36E+03	6	6	6
70	5.463	12.826	10	1.07E+02	3.22E+02	5.67E+02	5	4	5
71	5.648	12.900	10	7.02E+02	6.64E+02	1.65E+03	6	6	7
72	5.451	12.890	10	6.35E+02	6.09E+02	1.51E+03	6	6	7
110	5.702	12.379	10	3.05E-01	9.34E+00	1.36E+01	1	1	1
111	5.784	12.296	10	2.49E-01	3.56E+00	5.33E+00	1	1	1
112	5.875	12.255	10	8.36E-05	1.97E+00	2.81E+00	1	1	1
113	5.966	12.148	10	0.00E+00	2.04E-01	2.91E-01	1	1	1
121	6.032	12.989	10	1.56E+01	1.51E+02	2.31E+02	2	1	3
122	5.929	12.964	10	3.18E+02	7.00E+02	1.32E+03	6	6	6
123	6.033	12.883	10	4.58E+01	1.91E+02	3.19E+02	2	1	4
124	5.934	12.874	10	2.50E+02	4.75E+02	9.29E+02	6	6	6
125	5.888	13.090	10	8.51E+02	5.74E+03	9.05E+03	6	6	8
126	5.793	13.170	10	5.60E+01	4.49E+01	1.20E+02	3	2	3
127	5.789	13.080	10	1.10E+03	9.19E+03	1.42E+04	6	6	9
128	5.929	13.162	10	4.07E+02	3.29E+03	5.11E+03	6	6	8
190	5.817	12.688	7	2.57E+01	1.60E+02	2.54E+02	2	1	4
191	5.850	12.720	7	1.45E+01	1.18E+02	1.83E+02	2	1	3
194	5.504	12.164	7	0.00E+00	2.66E-01	3.80E-01	1	1	1
195	5.583	12.163	7	0.00E+00	3.08E-01	4.40E-01	1	1	1
270	5.514	13.209	10	6.47E+00	1.54E+01	2.85E+01	2	1	2
271	5.566	13.193	10	5.62E+02	3.37E+03	5.38E+03	6	6	8
295	5.413	12.882	10	2.24E+01	1.07E+02	1.75E+02	2	1	3
296	5.537	12.816	10	8.81E+01	3.02E+02	5.20E+02	4	3	5
297	5.496	12.799	10	6.26E+02	6.45E+02	1.55E+03	6	6	7
298	5.561	12.909	10	5.28E+02	6.55E+02	1.46E+03	6	6	6
299	5.615	12.839	10	5.31E+02	7.29E+02	1.57E+03	6	6	7
300	5.608	12.984	10	9.18E+02	7.06E+03	1.10E+04	6	6	8
338	5.888	12.262	10	3.61E-04	2.22E+00	3.17E+00	1	1	1
339	5.993	12.248	10	0.00E+00	1.48E+00	2.11E+00	1	1	1
340	5.752	12.293	10	1.38E-01	3.44E+00	5.05E+00	1	1	1
341	5.706	12.340	10	1.95E-01	6.17E+00	9.01E+00	1	1	1
349	6.052	12.911	10	8.42E-03	1.34E-01	2.00E-01	1	1	1
350	6.039	13.007	10	9.22E+00	8.84E+01	1.36E+02	2	1	3
351	5.955	12.889	10	5.40E+02	5.75E+02	1.36E+03	6	6	6
352	5.960	12.980	10	9.98E+02	1.50E+03	3.14E+03	6	6	7
353	5.884	13.058	10	8.41E+02	7.46E+03	1.15E+04	6	6	8
354	5.911	13.172	10	4.16E+01	6.88E+01	1.40E+02	2	1	3
355	5.823	13.093	10	1.58E+02	9.95E+02	1.58E+03	6	5	7
356	5.820	13.172	10	2.75E+01	1.26E+02	2.08E+02	2	1	3
416	5.798	12.686	7	3.44E+01	1.91E+02	3.07E+02	2	1	4
417	5.881	12.714	7	4.06E+01	1.97E+02	3.22E+02	2	1	4

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

**Case 2a: Protected (Eye,
Respiratory Exposure)**

420	5.601	12.207	7	0.00E+00	8.12E-01	1.16E+00	1	1	1
421	5.517	12.227	7	0.00E+00	1.11E+00	1.59E+00	1	1	1

12 rounds at aimpoint (5.65, 13.35)

40	5.550	13.245	10	1.38E+01	6.63E+03	1.38E+01	2	1	
41	5.474	13.201	10	9.99E-01	2.49E+02	9.99E-01	1	1	
42	5.507	13.288	10	4.80E-03	8.93E+00	4.80E-03	1	1	
67	5.560	12.798	10	6.64E-01	4.05E+01	6.64E-01	1	1	
68	5.483	12.959	10	5.41E+00	2.72E+02	5.41E+00	2	1	
69	5.563	12.908	10	8.48E-01	9.51E+01	8.48E-01	1	1	
70	5.463	12.826	10	5.84E-01	4.83E+01	5.84E-01	1	1	
71	5.648	12.900	10	8.01E-01	6.99E+01	8.01E-01	1	1	
72	5.451	12.890	10	8.40E-01	6.15E+01	8.40E-01	1	1	
110	5.702	12.379	10	0.00E+00	9.45E-01	0.00E+00	1	1	
111	5.784	12.296	10	0.00E+00	2.15E-01	0.00E+00	1	1	
112	5.875	12.255	10	0.00E+00	9.11E-02	0.00E+00	1	1	
121	6.032	12.989	10	3.43E-01	6.66E+01	3.43E-01	1	1	
122	5.929	12.964	10	1.01E+00	1.49E+02	1.01E+00	1	1	
123	6.033	12.883	10	2.27E-01	4.64E+01	2.27E-01	1	1	
124	5.934	12.874	10	7.71E-01	7.74E+01	7.71E-01	1	1	
125	5.888	13.090	10	1.21E+01	2.01E+03	1.21E+01	2	1	
126	5.793	13.170	10	5.28E+00	4.63E+03	5.28E+00	2	1	
127	5.789	13.080	10	1.36E+01	1.87E+03	1.36E+01	2	1	
128	5.929	13.162	10	4.24E+00	5.10E+02	4.24E+00	1	1	
190	5.817	12.688	7	6.00E-01	2.16E+01	6.00E-01	1	1	
191	5.850	12.720	7	5.40E-01	2.04E+01	5.40E-01	1	1	
269	5.451	13.254	10	1.12E+01	6.52E+03	1.12E+01	2	1	
270	5.514	13.209	10	3.20E-01	5.62E+02	3.20E-01	1	1	
271	5.566	13.193	10	8.22E+00	1.45E+03	8.22E+00	2	1	
295	5.413	12.882	10	1.49E-01	1.84E+01	1.49E-01	1	1	
296	5.537	12.816	10	6.08E-01	4.80E+01	6.08E-01	1	1	
297	5.496	12.799	10	9.19E-01	7.09E+01	9.19E-01	1	1	
298	5.561	12.909	10	8.70E-01	9.28E+01	8.70E-01	1	1	
299	5.615	12.839	10	8.53E-01	8.89E+01	8.53E-01	1	1	
300	5.608	12.984	10	1.35E+01	5.77E+02	1.35E+01	2	1	
338	5.888	12.262	10	0.00E+00	1.05E-01	0.00E+00	1	1	
339	5.993	12.248	10	0.00E+00	5.88E-02	0.00E+00	1	1	
340	5.752	12.293	10	0.00E+00	1.93E-01	0.00E+00	1	1	
341	5.706	12.340	10	0.00E+00	5.13E-01	0.00E+00	1	1	
349	6.052	12.911	10	1.40E-04	1.95E+00	1.40E-04	1	1	
350	6.039	13.007	10	1.90E-01	3.96E+01	1.90E-01	1	1	
351	5.955	12.889	10	8.55E-01	6.99E+01	8.55E-01	1	1	
352	5.960	12.980	10	1.94E+00	1.70E+02	1.94E+00	1	1	
353	5.884	13.058	10	9.63E+00	9.46E+02	9.63E+00	2	1	
354	5.911	13.172	10	3.84E+00	3.59E+03	3.84E+00	1	1	
355	5.823	13.093	10	2.38E+00	4.57E+02	2.38E+00	1	1	
356	5.820	13.172	10	1.53E+00	1.37E+03	1.53E+00	1	1	
416	5.798	12.686	7	5.34E-01	2.34E+01	5.34E-01	1	1	
417	5.881	12.714	7	6.00E-01	2.71E+01	6.00E-01	1	1	
420	5.601	12.207	7	0.00E+00	1.14E-02	0.00E+00	1	1	
421	5.517	12.227	7	0.00E+00	5.15E-03	0.00E+00	1	1	

12 rounds at aimpoint (5.65, 13.35)

**Case 2b: Protected (Skin
Exposure)**

40	5.550	13.245	10	1.57E+02	1.90E+04	2.73E+04			9
41	5.474	13.201	10	1.10E+01	7.11E+02	1.03E+03			6
42	5.507	13.288	10	6.59E-02	2.55E+01	3.65E+01			2
67	5.560	12.798	10	5.44E+00	1.16E+02	1.71E+02			3
68	5.483	12.959	10	7.92E+01	7.78E+02	1.19E+03			6
69	5.563	12.908	10	1.28E+01	2.72E+02	4.01E+02			4
70	5.463	12.826	10	6.49E+00	1.38E+02	2.04E+02			3
71	5.648	12.900	10	8.61E+00	2.00E+02	2.94E+02			4
72	5.451	12.890	10	8.60E+00	1.76E+02	2.60E+02			4
110	5.702	12.379	10	6.26E-05	2.70E+00	3.86E+00			1
111	5.784	12.296	10	0.00E+00	6.15E-01	8.79E-01			1
112	5.875	12.255	10	0.00E+00	2.60E-01	3.71E-01			1
121	6.032	12.989	10	5.95E+00	1.91E+02	2.79E+02			4
122	5.929	12.964	10	2.31E+01	4.26E+02	6.32E+02			5
123	6.033	12.883	10	6.12E+00	1.33E+02	1.96E+02			3
124	5.934	12.874	10	1.04E+01	2.21E+02	3.26E+02			4
125	5.888	13.090	10	1.30E+02	5.75E+03	8.34E+03			8
126	5.793	13.170	10	6.67E+01	1.32E+04	1.89E+04			9

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

127	5.789	13.080	10	1.43E+02	5.34E+03	7.77E+03			8
128	5.929	13.162	10	4.40E+01	1.46E+03	2.13E+03			7
190	5.817	12.688	7	3.61E+00	6.16E+01	9.16E+01			2
191	5.850	12.720	7	3.33E+00	5.83E+01	8.66E+01			2
269	5.451	13.254	10	1.30E+02	1.87E+04	2.68E+04			9
270	5.514	13.209	10	4.78E+00	1.61E+03	2.30E+03			7
271	5.566	13.193	10	8.72E+01	4.13E+03	5.99E+03			8
295	5.413	12.882	10	1.85E+00	5.27E+01	7.71E+01			2
296	5.537	12.816	10	6.18E+00	1.37E+02	2.02E+02			3
297	5.496	12.799	10	9.64E+00	2.03E+02	3.00E+02			4
298	5.561	12.909	10	1.29E+01	2.65E+02	3.91E+02			4
299	5.615	12.839	10	1.78E+01	2.54E+02	3.81E+02			4
300	5.608	12.984	10	1.73E+02	1.65E+03	2.53E+03			7
338	5.888	12.262	10	0.00E+00	3.01E-01	4.30E-01			1
339	5.993	12.248	10	0.00E+00	1.68E-01	2.40E-01			1
340	5.752	12.293	10	0.00E+00	5.52E-01	7.89E-01			1
341	5.706	12.340	10	0.00E+00	1.47E+00	2.10E+00			1
349	6.052	12.911	10	2.18E-02	5.58E+00	7.99E+00			1
350	6.039	13.007	10	2.90E+00	1.13E+02	1.64E+02			3
351	5.955	12.889	10	9.27E+00	2.00E+02	2.95E+02			4
352	5.960	12.980	10	5.85E+01	4.86E+02	7.53E+02			6
353	5.884	13.058	10	1.02E+02	2.71E+03	3.97E+03			7
354	5.911	13.172	10	4.94E+01	1.03E+04	1.48E+04			9
355	5.823	13.093	10	2.85E+01	1.31E+03	1.90E+03			7
356	5.820	13.172	10	1.96E+01	3.91E+03	5.61E+03			8
416	5.798	12.686	7	3.76E+00	6.70E+01	9.95E+01			2
417	5.881	12.714	7	4.26E+00	7.75E+01	1.15E+02			3
420	5.601	12.207	7	0.00E+00	3.27E-02	4.67E-02			1
421	5.517	12.227	7	0.00E+00	1.47E-02	2.10E-02			1

Mustard (HD) 250kg Bomb
Heavy Attack
Height of Release: 70m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
24 rounds at aimpoint (5.75, 14.65)									
40	5.550	13.245	10	9.87E+02	7.25E+02	2.02E+03	6	6	7
41	5.474	13.201	10	3.06E+02	5.59E+02	1.10E+03	6	6	6
42	5.507	13.288	10	1.49E+03	4.17E+03	7.45E+03	6	7	8
67	5.560	12.798	10	4.89E+00	1.86E+01	3.15E+01	1	1	2
68	5.483	12.959	10	1.94E+01	8.41E+01	1.40E+02	2	1	3
69	5.563	12.908	10	1.06E+01	4.89E+01	8.05E+01	2	1	2
70	5.463	12.826	10	5.30E+00	1.80E+01	3.10E+01	2	1	2
71	5.648	12.900	10	8.91E+00	4.28E+01	7.01E+01	2	1	2
72	5.451	12.890	10	6.23E+00	2.60E+01	4.34E+01	2	1	2
102	5.474	13.777	10	2.47E+01	1.20E+02	1.96E+02	2	1	3
103	5.406	13.666	10	6.99E+00	4.79E+01	7.54E+01	2	1	2
105	5.476	13.706	10	3.53E+01	1.65E+02	2.71E+02	2	1	4
121	6.032	12.989	10	1.21E+01	6.44E+01	1.04E+02	2	1	3
122	5.929	12.964	10	1.86E+01	8.48E+01	1.40E+02	2	1	3
123	6.033	12.883	10	5.22E+00	2.30E+01	3.81E+01	2	1	2
124	5.934	12.874	10	8.94E+00	3.63E+01	6.08E+01	2	1	2
125	5.888	13.090	10	4.70E+02	3.29E+02	9.40E+02	6	6	6
126	5.793	13.170	10	9.85E+02	9.04E+02	2.28E+03	6	6	7
127	5.789	13.080	10	4.29E+02	3.05E+02	8.65E+02	6	6	6
128	5.929	13.162	10	2.90E+02	4.09E+02	8.74E+02	6	6	6
129	6.018	13.474	10	6.95E+02	2.25E+03	3.91E+03	6	6	7
130	6.010	13.396	10	2.49E+03	1.30E+04	2.11E+04	6	7	9
131	6.016	13.310	10	8.63E+02	3.08E+03	5.26E+03	6	6	8
133	6.062	13.731	10	6.38E-07	0.00E+00	6.38E-07	1	1	1
190	5.817	12.688	7	2.17E+00	6.36E+00	1.13E+01	1	1	1
191	5.850	12.720	7	2.71E+00	8.97E+00	1.55E+01	1	1	1
211	5.764	13.557	8	1.30E+03	3.84E+03	6.79E+03	6	7	8
212	5.766	13.622	8	6.84E+02	3.45E+03	5.61E+03	6	6	8
213	5.767	13.674	8	8.07E+02	5.39E+03	8.51E+03	6	6	8

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

269	5.451	13.254	10	1.01E+03	7.84E+02	2.13E+03	6	6	7
270	5.514	13.209	10	9.05E+02	1.10E+03	2.48E+03	6	6	7
271	5.566	13.193	10	4.39E+02	4.88E+02	1.14E+03	6	6	6
295	5.413	12.882	10	1.95E+00	1.05E+01	1.70E+01	1	1	1
296	5.537	12.816	10	5.56E+00	2.21E+01	3.71E+01	2	1	2
297	5.496	12.799	10	5.54E+00	1.80E+01	3.13E+01	2	1	2
298	5.561	12.909	10	1.05E+01	4.90E+01	8.05E+01	2	1	2
299	5.615	12.839	10	6.93E+00	2.81E+01	4.71E+01	2	1	2
300	5.608	12.984	10	3.33E+01	1.22E+02	2.08E+02	2	1	3
329	5.419	13.723	10	1.49E+01	9.29E+01	1.48E+02	2	1	3
330	5.408	13.795	10	3.05E-01	1.37E+00	2.26E+00	1	1	1
331	5.493	13.630	10	1.28E+03	8.41E+03	1.33E+04	6	7	9
349	6.052	12.911	10	2.13E+00	1.53E+01	2.40E+01	1	1	1
350	6.039	13.007	10	1.46E+01	5.59E+01	9.45E+01	2	1	2
351	5.955	12.889	10	8.57E+00	3.85E+01	6.36E+01	2	1	2
352	5.960	12.980	10	1.80E+01	8.65E+01	1.42E+02	2	1	3
353	5.884	13.058	10	2.39E+02	2.25E+02	5.60E+02	6	5	5
354	5.911	13.172	10	8.41E+02	8.25E+02	2.02E+03	6	6	7
355	5.823	13.093	10	2.42E+02	2.73E+02	6.32E+02	6	5	5
356	5.820	13.172	10	4.66E+02	5.91E+02	1.31E+03	6	6	6
357	6.039	13.482	10	2.48E+01	1.19E+02	1.95E+02	2	1	3
358	6.038	13.406	10	4.89E+01	2.15E+02	3.56E+02	2	1	4
359	6.041	13.323	10	5.87E+01	1.55E+02	2.80E+02	3	2	4
416	5.798	12.686	7	2.42E+00	6.26E+00	1.14E+01	1	1	1
417	5.881	12.714	7	3.01E+00	8.55E+00	1.52E+01	1	1	1
443	5.724	13.641	8	9.85E+01	5.97E+02	9.51E+02	4	3	6
444	5.772	13.525	8	5.55E+02	2.36E+03	3.93E+03	6	6	7
445	5.724	13.585	8	1.81E+02	1.17E+03	1.85E+03	6	5	7

Case 2a: Protected (Eye,
Respiratory Exposure)

24 rounds at aimpoint (5.65, 13.80)

1	6.093	14.476	10	4.74E+00	0.00E+00	4.74E+00	1	1	
2	6.092	14.323	10	1.74E+01	0.00E+00	1.74E+01	2	1	
3	6.056	14.272	10	2.07E+01	0.00E+00	2.07E+01	2	1	
4	5.928	14.340	10	3.86E+00	0.00E+00	3.86E+00	1	1	
5	5.996	14.233	10	2.13E+01	0.00E+00	2.13E+01	2	1	
6	5.940	14.453	10	1.62E+01	0.00E+00	1.62E+01	2	1	
40	5.550	13.245	10	0.00E+00	7.25E+02	0.00E+00	1	1	
41	5.474	13.201	10	0.00E+00	5.59E+02	0.00E+00	1	1	
42	5.507	13.288	10	0.00E+00	4.17E+03	0.00E+00	1	1	
67	5.560	12.798	10	0.00E+00	1.86E+01	0.00E+00	1	1	
68	5.483	12.959	10	0.00E+00	8.41E+01	0.00E+00	1	1	
69	5.563	12.908	10	0.00E+00	4.89E+01	0.00E+00	1	1	
70	5.463	12.826	10	0.00E+00	1.80E+01	0.00E+00	1	1	
71	5.648	12.900	10	0.00E+00	4.28E+01	0.00E+00	1	1	
72	5.451	12.890	10	0.00E+00	2.60E+01	0.00E+00	1	1	
97	5.610	14.388	10	1.43E+01	0.00E+00	1.43E+01	2	1	
98	5.554	14.447	10	2.30E+01	0.00E+00	2.30E+01	2	1	
99	5.616	14.500	10	3.94E-01	0.00E+00	3.94E-01	1	1	
100	5.667	14.564	10	3.05E+00	0.00E+00	3.05E+00	1	1	
102	5.474	13.777	10	0.00E+00	1.20E+02	0.00E+00	1	1	
103	5.406	13.666	10	0.00E+00	4.79E+01	0.00E+00	1	1	
105	5.476	13.706	10	4.32E-03	1.65E+02	4.32E-03	1	1	
106	5.642	13.947	10	2.09E+00	0.00E+00	2.09E+00	1	1	
107	5.653	13.814	10	1.73E+00	0.00E+00	1.73E+00	1	1	
108	5.627	14.130	10	2.63E+00	0.00E+00	2.63E+00	1	1	
109	5.702	14.036	10	1.10E+01	0.00E+00	1.10E+01	2	1	
120	6.033	14.438	10	8.64E+00	0.00E+00	8.64E+00	2	1	
121	6.032	12.989	10	0.00E+00	6.44E+01	0.00E+00	1	1	
122	5.929	12.964	10	0.00E+00	8.48E+01	0.00E+00	1	1	
123	6.033	12.883	10	0.00E+00	2.30E+01	0.00E+00	1	1	
124	5.934	12.874	10	0.00E+00	3.63E+01	0.00E+00	1	1	
125	5.888	13.090	10	0.00E+00	3.29E+02	0.00E+00	1	1	
126	5.793	13.170	10	0.00E+00	9.04E+02	0.00E+00	1	1	
127	5.789	13.080	10	0.00E+00	3.05E+02	0.00E+00	1	1	
128	5.929	13.162	10	0.00E+00	4.09E+02	0.00E+00	1	1	
129	6.018	13.474	10	2.14E-01	2.25E+03	2.14E-01	1	1	
130	6.010	13.396	10	0.00E+00	1.30E+04	0.00E+00	1	1	
131	6.016	13.310	10	0.00E+00	3.08E+03	0.00E+00	1	1	
132	6.074	13.908	10	2.13E+00	0.00E+00	2.13E+00	1	1	
133	6.062	13.731	10	1.46E+00	0.00E+00	1.46E+00	1	1	

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

134	6.072	13.821	10	2.10E+00	0.00E+00	2.10E+00	1	1	
190	5.817	12.688	7	0.00E+00	6.36E+00	0.00E+00	1	1	
191	5.850	12.720	7	0.00E+00	8.97E+00	0.00E+00	1	1	
210	5.928	14.339	8	3.86E+00	0.00E+00	3.86E+00	1	1	
211	5.764	13.557	8	5.29E-01	3.84E+03	5.29E-01	1	1	
212	5.766	13.622	8	8.60E-01	3.45E+03	8.60E-01	1	1	
213	5.767	13.674	8	1.17E+00	5.39E+03	1.17E+00	1	1	
214	5.958	13.839	8	2.01E+00	0.00E+00	2.01E+00	1	1	
215	5.913	13.903	8	2.32E+00	0.00E+00	2.32E+00	1	1	
216	5.912	13.851	8	2.29E+00	0.00E+00	2.29E+00	1	1	
231	5.991	14.398	10	1.43E+01	0.00E+00	1.43E+01	2	1	
232	6.000	14.484	10	4.61E+00	0.00E+00	4.61E+00	1	1	
233	6.059	14.191	10	1.55E+01	0.00E+00	1.55E+01	2	1	
234	6.048	14.352	10	2.36E+01	0.00E+00	2.36E+01	2	1	
235	5.928	14.253	10	4.48E+00	0.00E+00	4.48E+00	1	1	
236	5.995	14.318	10	2.00E+01	0.00E+00	2.00E+01	2	1	
269	5.451	13.254	10	0.00E+00	7.84E+02	0.00E+00	1	1	
270	5.514	13.209	10	0.00E+00	1.10E+03	0.00E+00	1	1	
271	5.566	13.193	10	0.00E+00	4.88E+02	0.00E+00	1	1	
295	5.413	12.882	10	0.00E+00	1.05E+01	0.00E+00	1	1	
296	5.537	12.816	10	0.00E+00	2.21E+01	0.00E+00	1	1	
297	5.496	12.799	10	0.00E+00	1.80E+01	0.00E+00	1	1	
298	5.561	12.909	10	0.00E+00	4.90E+01	0.00E+00	1	1	
299	5.615	12.839	10	0.00E+00	2.81E+01	0.00E+00	1	1	
300	5.608	12.984	10	0.00E+00	1.22E+02	0.00E+00	1	1	
325	5.702	14.442	10	1.32E+01	0.00E+00	1.32E+01	2	1	
326	5.689	14.515	10	3.91E-01	0.00E+00	3.91E-01	1	1	
327	5.512	14.539	10	3.45E-02	0.00E+00	3.45E-02	1	1	
328	5.636	14.371	10	1.15E+01	0.00E+00	1.15E+01	2	1	
329	5.419	13.723	10	0.00E+00	9.29E+01	0.00E+00	1	1	
330	5.408	13.795	10	0.00E+00	1.37E+00	0.00E+00	1	1	
331	5.493	13.630	10	4.02E-02	8.41E+03	4.02E-02	1	1	
334	5.691	13.943	10	2.50E+00	0.00E+00	2.50E+00	1	1	
335	5.690	14.073	10	1.19E+01	0.00E+00	1.19E+01	2	1	
336	5.654	14.156	10	1.40E+01	0.00E+00	1.40E+01	2	1	
337	5.627	13.811	10	2.07E+00	0.00E+00	2.07E+00	1	1	
348	6.048	14.515	10	1.75E+01	0.00E+00	1.75E+01	2	1	
349	6.052	12.911	10	0.00E+00	1.53E+01	0.00E+00	1	1	
350	6.039	13.007	10	0.00E+00	5.59E+01	0.00E+00	1	1	
351	5.955	12.889	10	0.00E+00	3.85E+01	0.00E+00	1	1	
352	5.960	12.980	10	0.00E+00	8.65E+01	0.00E+00	1	1	
353	5.884	13.058	10	0.00E+00	2.25E+02	0.00E+00	1	1	
354	5.911	13.172	10	0.00E+00	8.25E+02	0.00E+00	1	1	
355	5.823	13.093	10	0.00E+00	2.73E+02	0.00E+00	1	1	
356	5.820	13.172	10	0.00E+00	5.91E+02	0.00E+00	1	1	
357	6.039	13.482	10	9.99E-02	1.19E+02	9.99E-02	1	1	
358	6.038	13.406	10	5.66E-03	2.15E+02	5.66E-03	1	1	
359	6.041	13.323	10	0.00E+00	1.55E+02	0.00E+00	1	1	
360	6.145	13.753	10	4.08E-01	0.00E+00	4.08E-01	1	1	
361	6.165	13.823	10	5.03E-02	0.00E+00	5.03E-02	1	1	
362	6.119	13.900	10	1.30E+00	0.00E+00	1.30E+00	1	1	
416	5.798	12.686	7	0.00E+00	6.26E+00	0.00E+00	1	1	
417	5.881	12.714	7	0.00E+00	8.55E+00	0.00E+00	1	1	
442	5.998	14.225	8	2.30E+01	0.00E+00	2.30E+01	2	1	
443	5.724	13.641	8	1.08E+00	5.97E+02	1.08E+00	1	1	
444	5.772	13.525	8	3.83E-01	2.36E+03	3.83E-01	1	1	
445	5.724	13.585	8	6.83E-01	1.17E+03	6.83E-01	1	1	
446	5.932	13.871	8	2.15E+00	0.00E+00	2.15E+00	1	1	
447	5.920	13.941	8	2.38E+00	0.00E+00	2.38E+00	1	1	
448	5.927	13.817	8	2.04E+00	0.00E+00	2.04E+00	1	1	

Case 2b: Protected (Skin Exposure)

24 rounds at aimpoint (5.65, 13.80)

1	6.093	14.476	10	5.69E+01	8.65E+03	1.24E+04			9
2	6.092	14.323	10	2.04E+02	4.86E+03	7.15E+03			8
3	6.056	14.272	10	2.77E+02	6.85E+03	1.01E+04			8
4	5.928	14.340	10	5.74E+01	2.85E+03	4.13E+03			8
5	5.996	14.233	10	2.94E+02	1.51E+04	2.19E+04			9
6	5.940	14.453	10	1.82E+02	3.81E+03	5.62E+03			8
40	5.550	13.245	10	0.00E+00	5.08E+01	7.26E+01			2
41	5.474	13.201	10	0.00E+00	3.92E+01	5.60E+01			2

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

42	5.507	13.288	10	0.00E+00	2.92E+02	4.17E+02			4
67	5.560	12.798	10	0.00E+00	1.30E+00	1.86E+00			1
68	5.483	12.959	10	0.00E+00	5.88E+00	8.40E+00			1
69	5.563	12.908	10	0.00E+00	3.42E+00	4.89E+00			1
70	5.463	12.826	10	0.00E+00	1.26E+00	1.80E+00			1
71	5.648	12.900	10	0.00E+00	3.00E+00	4.29E+00			1
72	5.451	12.890	10	0.00E+00	1.82E+00	2.60E+00			1
97	5.610	14.388	10	1.65E+02	6.38E+03	9.28E+03			8
98	5.554	14.447	10	2.56E+02	4.94E+03	7.31E+03			8
99	5.616	14.500	10	6.53E+00	1.99E+03	2.85E+03			7
100	5.667	14.564	10	3.55E+01	4.97E+03	7.14E+03			8
102	5.474	13.777	10	5.87E-05	1.19E+01	1.70E+01			1
103	5.406	13.666	10	0.00E+00	3.41E+00	4.87E+00			1
104	5.461	13.842	10	5.28E-05	2.74E+00	3.91E+00			1
105	5.476	13.706	10	1.96E-02	1.41E+01	2.02E+01			1
106	5.642	13.947	10	1.60E+01	1.94E+02	2.93E+02			4
107	5.653	13.814	10	7.03E+00	6.89E+01	1.05E+02			3
108	5.627	14.130	10	4.58E+01	7.55E+02	1.12E+03			6
109	5.702	14.036	10	1.93E+02	1.14E+03	1.82E+03			7
120	6.033	14.438	10	9.91E+01	2.25E+03	3.31E+03			7
121	6.032	12.989	10	0.00E+00	4.50E+00	6.43E+00			1
122	5.929	12.964	10	0.00E+00	5.94E+00	8.49E+00			1
123	6.033	12.883	10	0.00E+00	1.61E+00	2.30E+00			1
124	5.934	12.874	10	0.00E+00	2.54E+00	3.63E+00			1
125	5.888	13.090	10	0.00E+00	2.31E+01	3.30E+01			2
126	5.793	13.170	10	0.00E+00	6.33E+01	9.04E+01			2
127	5.789	13.080	10	0.00E+00	2.14E+01	3.06E+01			2
128	5.929	13.162	10	0.00E+00	2.86E+01	4.09E+01			2
129	6.018	13.474	10	6.98E-01	1.60E+02	2.29E+02			3
130	6.010	13.396	10	0.00E+00	9.12E+02	1.30E+03			6
131	6.016	13.310	10	0.00E+00	2.16E+02	3.09E+02			4
132	6.074	13.908	10	1.50E+01	1.73E+02	2.62E+02			4
133	6.062	13.731	10	5.41E+00	3.41E+01	5.41E+01			2
134	6.072	13.821	10	9.35E+00	8.21E+01	1.27E+02			3
190	5.817	12.688	7	0.00E+00	4.45E-01	6.36E-01			1
191	5.850	12.720	7	0.00E+00	6.28E-01	8.97E-01			1
210	5.928	14.339	8	5.76E+01	2.83E+03	4.10E+03			8
211	5.764	13.557	8	1.72E+00	2.76E+02	3.96E+02			4
212	5.766	13.622	8	2.89E+00	2.55E+02	3.67E+02			4
213	5.767	13.674	8	4.01E+00	4.00E+02	5.75E+02			5
214	5.958	13.839	8	9.04E+00	8.68E+01	1.33E+02			3
215	5.913	13.903	8	2.33E+01	2.06E+02	3.18E+02			4
216	5.912	13.851	8	1.30E+01	1.28E+02	1.96E+02			3
231	5.991	14.398	10	1.67E+02	7.52E+03	1.09E+04			8
232	6.000	14.484	10	5.68E+01	9.59E+03	1.38E+04			9
233	6.059	14.191	10	1.97E+02	1.93E+03	2.95E+03			7
234	6.048	14.352	10	3.08E+02	1.84E+04	2.66E+04			9
235	5.928	14.253	10	6.55E+01	1.48E+03	2.18E+03			7
236	5.995	14.318	10	2.34E+02	5.74E+03	8.43E+03			8
269	5.451	13.254	10	0.00E+00	5.49E+01	7.84E+01			2
270	5.514	13.209	10	0.00E+00	7.68E+01	1.10E+02			3
271	5.566	13.193	10	0.00E+00	3.41E+01	4.87E+01			2
295	5.413	12.882	10	0.00E+00	7.35E-01	1.05E+00			1
296	5.537	12.816	10	0.00E+00	1.55E+00	2.21E+00			1
297	5.496	12.799	10	0.00E+00	1.26E+00	1.80E+00			1
298	5.561	12.909	10	0.00E+00	3.43E+00	4.90E+00			1
299	5.615	12.839	10	0.00E+00	1.96E+00	2.80E+00			1
300	5.608	12.984	10	0.00E+00	8.53E+00	1.22E+01			1
325	5.702	14.442	10	1.51E+02	1.66E+04	2.39E+04			9
326	5.689	14.515	10	6.58E+00	2.11E+03	3.02E+03			7
327	5.512	14.539	10	5.63E-01	8.62E+01	1.24E+02			3
328	5.636	14.371	10	1.46E+02	6.97E+03	1.01E+04			8
329	5.419	13.723	10	0.00E+00	6.71E+00	9.59E+00			1
330	5.408	13.795	10	0.00E+00	1.86E-01	2.66E-01			1
331	5.493	13.630	10	1.15E-01	5.91E+02	8.44E+02			6
334	5.691	13.943	10	5.26E+01	3.30E+02	5.24E+02			5
335	5.690	14.073	10	1.70E+02	1.46E+03	2.26E+03			7
336	5.654	14.156	10	2.05E+02	1.39E+03	2.19E+03			7
337	5.627	13.811	10	8.81E+00	7.83E+01	1.21E+02			3

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

348	6.048	14.515	10	2.04E+02	1.29E+04	1.86E+04			9
349	6.052	12.911	10	0.00E+00	1.07E+00	1.53E+00			1
350	6.039	13.007	10	0.00E+00	3.91E+00	5.59E+00			1
351	5.955	12.889	10	0.00E+00	2.69E+00	3.84E+00			1
352	5.960	12.980	10	0.00E+00	6.05E+00	8.64E+00			1
353	5.884	13.058	10	0.00E+00	1.58E+01	2.26E+01			1
354	5.911	13.172	10	0.00E+00	5.78E+01	8.26E+01			2
355	5.823	13.093	10	0.00E+00	1.91E+01	2.73E+01			2
356	5.820	13.172	10	0.00E+00	4.14E+01	5.91E+01			2
357	6.039	13.482	10	4.01E-01	1.12E+01	1.64E+01			1
358	6.038	13.406	10	1.62E-02	1.58E+01	2.26E+01			1
359	6.041	13.323	10	0.00E+00	1.10E+01	1.57E+01			1
360	6.145	13.753	10	1.62E+00	1.75E+01	2.66E+01			2
361	6.165	13.823	10	2.96E-01	1.18E+01	1.72E+01			1
362	6.119	13.900	10	1.32E+01	1.41E+02	2.15E+02			3
416	5.798	12.686	7	0.00E+00	4.38E-01	6.26E-01			1
417	5.881	12.714	7	0.00E+00	5.99E-01	8.56E-01			1
442	5.998	14.225	8	3.23E+02	1.52E+04	2.20E+04			9
443	5.724	13.641	8	3.56E+00	5.85E+01	8.71E+01			2
444	5.772	13.525	8	1.27E+00	1.70E+02	2.44E+02			3
445	5.724	13.585	8	2.28E+00	9.16E+01	1.33E+02			3
446	5.932	13.871	8	1.12E+01	1.25E+02	1.90E+02			3
447	5.920	13.941	8	3.09E+01	2.66E+02	4.11E+02			4
448	5.927	13.817	8	9.37E+00	8.30E+01	1.28E+02			3

Mustard (HD) 250kg TBM
Light Attack
Height of Release: 500m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
1 round at aimpoint (6.00, 14.55)									
2	6.092	14.323	10	7.87E-01	3.06E+00	5.16E+00	1	1	1
3	6.056	14.272	10	1.33E+02	2.18E+02	4.44E+02	5	4	4
4	5.928	14.340	10	6.55E+00	1.11E+01	2.24E+01	2	1	1
5	5.996	14.233	10	8.80E+02	1.78E+03	3.42E+03	6	6	7
6	5.940	14.453	10	1.95E+00	0.00E+00	1.95E+00	1	1	1
120	6.033	14.438	10	4.81E+01	4.74E+01	1.16E+02	2	1	3
132	6.074	13.908	10	1.94E+01	5.20E+01	9.37E+01	2	1	2
133	6.062	13.731	10	2.19E+00	3.08E+00	6.59E+00	1	1	1
134	6.072	13.821	10	7.45E+00	1.55E+01	2.96E+01	2	1	2
210	5.928	14.339	8	6.74E+00	1.15E+01	2.32E+01	2	1	1
214	5.958	13.839	8	1.19E+01	2.65E+01	4.98E+01	2	1	2
215	5.913	13.903	8	1.50E+01	3.96E+01	7.16E+01	2	1	2
216	5.912	13.851	8	8.83E+00	1.97E+01	3.70E+01	2	1	2
231	5.991	14.398	10	6.34E+02	1.75E+03	3.13E+03	6	6	7
232	6.000	14.484	10	1.16E+02	4.93E+02	8.20E+02	5	4	6
233	6.059	14.191	10	1.70E+02	3.51E+02	6.71E+02	6	5	5
234	6.048	14.352	10	8.09E+01	9.50E+01	2.17E+02	4	3	3
235	5.928	14.253	10	4.32E+01	9.45E+01	1.78E+02	2	1	3
236	5.995	14.318	10	1.19E+03	2.62E+03	4.93E+03	6	6	8
348	6.048	14.515	10	1.75E-02	3.23E-02	6.36E-02	1	1	1
360	6.145	13.753	10	1.26E+00	1.61E+00	3.56E+00	1	1	1
361	6.165	13.823	10	2.04E+00	3.38E+00	6.87E+00	1	1	1
362	6.119	13.900	10	8.52E+00	2.27E+01	4.09E+01	2	1	2
442	5.998	14.225	8	8.60E+02	1.73E+03	3.33E+03	6	6	7
446	5.932	13.871	8	1.32E+01	3.38E+01	6.15E+01	2	1	2
447	5.920	13.941	8	2.34E+01	6.64E+01	1.18E+02	2	1	3
448	5.927	13.817	8	6.96E+00	1.41E+01	2.71E+01	2	1	2

Case 2a: Protected (Eye,
Respiratory Exposure)

Case 2b: Zero to Nine Minutes*
(protected)

1 round at aimpoint (5.85, 15.00)									
12	5.853	14.870	10	0.00E+00	5.14E+01	0.00E+00	1	1	
1 round at aimpoint (5.85, 15.00)									
10	5.849	14.797	10	2.64E+00	2.79E+03	3.99E+03			7
11	5.840	14.745	10	9.82E-01	1.52E+03	2.17E+03			7
12	5.853	14.870	10	1.12E+00	1.63E+03	2.33E+03			7
240	5.917	14.848	10	0.00E+00	1.46E+00	2.09E+00			1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

241	5.911	14.774	10	0.00E+00	2.99E+01	4.27E+01			2
242	5.917	14.700	10	0.00E+00	2.84E+01	4.06E+01			2

Mustard (HD) 500kg TBM
Moderate Attack
Release Height: 800m

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
2 rounds at aimpoint (5.70, 13.90)									
40	5.550	13.245	10	3.17E+01	8.33E+01	1.51E+02	2	1	3
41	5.474	13.201	10	1.02E+02	2.44E+02	4.51E+02	5	4	4
42	5.507	13.288	10	8.35E+01	2.21E+02	3.99E+02	4	3	4
67	5.560	12.798	10	1.69E+00	2.05E+00	4.62E+00	1	1	1
68	5.483	12.959	10	1.68E+01	3.54E+01	6.74E+01	2	1	2
69	5.563	12.908	10	5.10E+00	9.18E+00	1.82E+01	2	1	1
70	5.463	12.826	10	5.62E+00	7.08E+00	1.57E+01	2	1	1
71	5.648	12.900	10	1.03E+00	2.05E+00	3.96E+00	1	1	1
72	5.451	12.890	10	1.10E+01	1.83E+01	3.71E+01	2	1	2
101	5.392	13.905	10	2.97E+01	1.35E+02	2.23E+02	2	1	3
102	5.474	13.777	10	1.95E+01	3.08E+01	6.35E+01	2	1	2
103	5.406	13.666	10	1.07E+03	2.20E+03	4.21E+03	6	6	8
104	5.461	13.842	10	4.57E+00	2.53E+00	8.18E+00	1	1	1
105	5.476	13.706	10	8.59E+01	1.38E+02	2.83E+02	4	3	4
110	5.702	12.379	10	0.00E+00	3.76E-03	5.37E-03	1	1	1
112	5.875	12.255	10	4.81E-05	2.17E-02	3.10E-02	1	1	1
121	6.032	12.989	10	3.58E+02	7.80E+02	1.47E+03	6	6	6
122	5.929	12.964	10	1.08E+02	2.55E+02	4.72E+02	5	4	4
123	6.033	12.883	10	1.85E+02	4.59E+02	8.41E+02	6	5	6
124	5.934	12.874	10	8.70E+01	2.20E+02	4.01E+02	4	3	4
125	5.888	13.090	10	2.17E+01	4.76E+01	8.97E+01	2	1	2
126	5.793	13.170	10	0.00E+00	1.71E-02	2.44E-02	1	1	1
127	5.789	13.080	10	6.77E-04	4.08E-01	5.84E-01	1	1	1
128	5.929	13.162	10	7.72E+01	1.72E+02	3.23E+02	4	3	4
129	6.018	13.474	10	2.27E+01	7.87E+01	1.35E+02	2	1	3
130	6.010	13.396	10	1.55E+02	4.37E+02	7.79E+02	6	5	6
131	6.016	13.310	10	5.61E+02	1.25E+03	2.35E+03	6	6	7
189	5.211	12.855	7	2.45E+00	2.76E+00	6.39E+00	1	1	1
190	5.817	12.688	7	5.59E+00	1.39E+01	2.54E+01	2	1	2
191	5.850	12.720	7	1.08E+01	2.81E+01	5.09E+01	2	1	2
192	5.199	13.137	7	6.22E+00	1.76E+01	3.14E+01	2	1	2
193	5.224	13.195	7	1.35E+01	3.82E+01	6.81E+01	2	1	2
269	5.451	13.254	10	1.68E+02	4.00E+02	7.39E+02	6	5	5
270	5.514	13.209	10	6.26E+01	1.57E+02	2.87E+02	3	2	4
271	5.566	13.193	10	2.19E+01	6.06E+01	1.08E+02	2	1	3
295	5.413	12.882	10	1.06E+01	1.77E+01	3.59E+01	2	1	2
296	5.537	12.816	10	2.89E+00	3.60E+00	8.03E+00	1	1	1
297	5.496	12.799	10	3.89E+00	3.65E+00	9.10E+00	1	1	1
298	5.561	12.909	10	5.26E+00	9.53E+00	1.89E+01	2	1	1
299	5.615	12.839	10	1.43E+00	1.84E+00	4.06E+00	1	1	1
300	5.608	12.984	10	4.51E+00	9.98E+00	1.88E+01	1	1	1
329	5.419	13.723	10	6.21E+02	1.52E+03	2.79E+03	6	6	7
330	5.408	13.795	10	3.86E+02	1.35E+03	2.31E+03	6	6	7
331	5.493	13.630	10	6.70E+01	1.25E+02	2.46E+02	3	2	3
332	5.361	13.699	10	3.14E+02	6.23E+02	1.20E+03	6	6	6
333	5.363	13.843	10	5.46E+01	2.03E+02	3.45E+02	3	2	4
338	5.888	12.262	10	1.35E-04	5.94E-02	8.50E-02	1	1	1
339	5.993	12.248	10	3.09E-04	1.50E-01	2.15E-01	1	1	1
349	6.052	12.911	10	2.20E+02	5.31E+02	9.79E+02	6	5	6
350	6.039	13.007	10	3.96E+02	8.52E+02	1.61E+03	6	6	7
351	5.955	12.889	10	1.20E+02	3.04E+02	5.54E+02	5	4	5
352	5.960	12.980	10	1.96E+02	4.39E+02	8.23E+02	6	5	6
353	5.884	13.058	10	2.52E+01	5.67E+01	1.06E+02	2	1	3
354	5.911	13.172	10	3.21E+01	7.27E+01	1.36E+02	2	1	3
355	5.823	13.093	10	6.32E-01	2.87E+00	4.73E+00	1	1	1
356	5.820	13.172	10	1.00E-03	3.46E-01	4.95E-01	1	1	1

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

357	6.039	13.482	10	2.25E+01	8.83E+01	1.49E+02	2	1	3
358	6.038	13.406	10	1.67E+02	5.13E+02	9.00E+02	6	5	6
359	6.041	13.323	10	5.77E+02	1.33E+03	2.48E+03	6	6	7
416	5.798	12.686	7	3.47E+00	8.45E+00	1.55E+01	1	1	1
417	5.881	12.714	7	1.89E+01	4.91E+01	8.90E+01	2	1	2
418	5.228	13.115	7	1.25E+01	3.34E+01	6.02E+01	2	1	2
419	5.264	13.099	7	2.08E+01	5.61E+01	1.01E+02	2	1	3
439	5.211	12.851	8	2.36E+00	2.59E+00	6.06E+00	1	1	1

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

2 rounds at aimpoint (4.90, 13.40)									
0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
2 rounds at aimpoint (4.90, 13.40)									
84	4.595	13.057	10	0.00E+00	2.54E+00	3.63E+00			1
85	4.610	13.426	10	0.00E+00	6.36E+01	9.09E+01			2
89	4.604	13.250	10	9.50E-01	1.47E+03	2.10E+03			7
189	5.211	12.855	7	7.70E-03	3.59E+02	5.13E+02			5
313	4.617	13.310	10	3.60E-01	8.26E+02	1.18E+03			6
316	4.659	13.174	10	0.00E+00	3.37E+01	4.81E+01			2
419	5.264	13.099	7	0.00E+00	2.25E-03	3.21E-03			1
439	5.211	12.851	8	7.95E-03	3.65E+02	5.21E+02			5

Mustard (HD) 500kg TBM
Heavy Attack
Release Height: 800m

Grid Position (Icon #)	Xwind	Upwind	Number of Persons	Vapor Exposure (mg-min/m³)	Liquid Exposure (mg)	Equivalent Exposure (mg-min/m³)	Injury Severity Category		
							E	R	S
4 rounds at aimpoint (5.80, 14.70)									
2	6.092	14.323	10	7.86E+00	3.10E+01	5.21E+01	2	1	2
3	6.056	14.272	10	1.29E+02	5.51E+02	9.16E+02	5	4	6
4	5.928	14.340	10	6.97E-05	0.00E+00	6.97E-05	1	1	1
5	5.996	14.233	10	1.68E+01	1.84E+01	4.31E+01	2	1	2
40	5.550	13.245	10	0.00E+00	1.61E-02	2.30E-02	1	1	1
69	5.563	12.908	10	1.33E-05	8.53E-03	1.22E-02	1	1	1
71	5.648	12.900	10	6.13E-04	3.03E-01	4.33E-01	1	1	1
97	5.610	14.388	10	2.41E+01	5.64E+01	1.05E+02	2	1	3
98	5.554	14.447	10	3.26E+02	5.66E+02	1.13E+03	6	6	6
99	5.616	14.500	10	2.11E+00	1.79E+00	4.67E+00	1	1	1
100	5.667	14.564	10	1.58E-01	0.00E+00	1.58E-01	1	1	1
101	5.392	13.905	10	3.11E+01	8.54E+01	1.53E+02	2	1	3
102	5.474	13.777	10	2.34E+01	5.32E+01	9.94E+01	2	1	2
103	5.406	13.666	10	6.43E+00	9.58E+00	2.01E+01	2	1	1
104	5.461	13.842	10	3.79E+01	9.48E+01	1.73E+02	2	1	3
105	5.476	13.706	10	1.25E+01	2.29E+01	4.52E+01	2	1	2
106	5.642	13.947	10	2.85E+01	7.88E+01	1.41E+02	2	1	3
107	5.653	13.814	10	1.26E+01	2.97E+01	5.50E+01	2	1	2
108	5.627	14.130	10	5.97E+01	1.63E+02	2.93E+02	3	2	4
109	5.702	14.036	10	8.16E+00	2.36E+01	4.19E+01	2	1	2
120	6.033	14.438	10	7.37E-05	0.00E+00	7.37E-05	1	1	1
121	6.032	12.989	10	5.51E+00	7.23E+00	1.58E+01	2	1	1
122	5.929	12.964	10	7.02E+00	9.29E+00	2.03E+01	2	1	1
123	6.033	12.883	10	1.93E+00	1.43E+00	3.97E+00	1	1	1
124	5.934	12.874	10	2.79E+00	2.18E+00	5.90E+00	1	1	1
125	5.888	13.090	10	2.36E+01	4.84E+01	9.27E+01	2	1	2
126	5.793	13.170	10	2.45E+01	5.90E+01	1.09E+02	2	1	3
127	5.789	13.080	10	1.21E+01	2.48E+01	4.75E+01	2	1	2
128	5.929	13.162	10	4.18E+01	9.87E+01	1.83E+02	2	1	3
129	6.018	13.474	10	1.65E+02	3.62E+02	6.82E+02	6	5	5
130	6.010	13.396	10	1.23E+02	2.74E+02	5.14E+02	5	4	5
131	6.016	13.310	10	7.42E+01	1.63E+02	3.07E+02	4	3	4
132	6.074	13.908	10	1.14E+03	1.87E+03	3.81E+03	6	6	7
133	6.062	13.731	10	4.66E+02	9.94E+02	1.89E+03	6	6	7
134	6.072	13.821	10	7.43E+02	1.44E+03	2.80E+03	6	6	7
191	5.850	12.720	7	1.28E-04	6.24E-02	8.93E-02	1	1	1
210	5.928	14.339	8	7.67E-05	0.00E+00	7.67E-05	1	1	1
211	5.764	13.557	8	2.83E+01	7.56E+01	1.36E+02	2	1	3
212	5.766	13.622	8	2.00E+01	5.22E+01	9.46E+01	2	1	2

Case 1: Unprotected (Eye,
Respiratory, Skin Exposure)

Table G5
HD Exposure Estimates
Light Infantry Brigade, Defense

213	5.767	13.674	8	1.33E+01	3.06E+01	5.70E+01	2	1	2
214	5.958	13.839	8	3.16E+02	5.54E+02	1.11E+03	6	6	6
215	5.913	13.903	8	4.53E+02	1.50E+03	2.60E+03	6	6	7
216	5.912	13.851	8	7.46E+02	2.05E+03	3.67E+03	6	6	7
231	5.991	14.398	10	2.83E-04	0.00E+00	2.83E-04	1	1	1
233	6.059	14.191	10	4.64E+02	1.51E+03	2.62E+03	6	6	7
234	6.048	14.352	10	9.50E-01	0.00E+00	9.50E-01	1	1	1
235	5.928	14.253	10	5.43E-01	0.00E+00	5.43E-01	1	1	1
236	5.995	14.318	10	2.61E-01	0.00E+00	2.61E-01	1	1	1
270	5.514	13.209	10	0.00E+00	3.70E-02	5.29E-02	1	1	1
271	5.566	13.193	10	2.05E-04	5.34E-01	7.63E-01	1	1	1
298	5.561	12.909	10	1.26E-05	8.12E-03	1.16E-02	1	1	1
299	5.615	12.839	10	0.00E+00	2.71E-02	3.87E-02	1	1	1
300	5.608	12.984	10	1.52E-01	4.30E-01	7.66E-01	1	1	1
325	5.702	14.442	10	1.07E-04	0.00E+00	1.07E-04	1	1	1
326	5.689	14.515	10	3.91E-02	0.00E+00	3.91E-02	1	1	1
327	5.512	14.539	10	5.75E+02	1.73E+03	3.05E+03	6	6	7
328	5.636	14.371	10	1.30E+01	2.90E+01	5.44E+01	2	1	2
329	5.419	13.723	10	1.12E+01	2.18E+01	4.23E+01	2	1	2
330	5.408	13.795	10	1.83E+01	4.25E+01	7.90E+01	2	1	2
331	5.493	13.630	10	6.42E+00	8.41E+00	1.84E+01	2	1	1
332	5.361	13.699	10	5.86E+00	9.13E+00	1.89E+01	2	1	1
333	5.363	13.843	10	1.53E+01	3.85E+01	7.03E+01	2	1	2
334	5.691	13.943	10	1.14E+01	3.22E+01	5.74E+01	2	1	2
335	5.690	14.073	10	1.19E+01	3.41E+01	6.06E+01	2	1	2
336	5.654	14.156	10	2.33E+01	6.66E+01	1.18E+02	2	1	3
337	5.627	13.811	10	1.73E+01	4.05E+01	7.52E+01	2	1	2
349	6.052	12.911	10	2.10E+00	1.85E+00	4.74E+00	1	1	1
350	6.039	13.007	10	6.23E+00	8.52E+00	1.84E+01	2	1	1
351	5.955	12.889	10	3.37E+00	2.60E+00	7.08E+00	1	1	1
352	5.960	12.980	10	7.82E+00	1.08E+01	2.32E+01	2	1	1
353	5.884	13.058	10	1.74E+01	3.29E+01	6.44E+01	2	1	2
354	5.911	13.172	10	4.64E+01	1.12E+02	2.06E+02	2	1	3
355	5.823	13.093	10	1.76E+01	3.74E+01	7.10E+01	2	1	2
356	5.820	13.172	10	3.22E+01	7.77E+01	1.43E+02	2	1	3
357	6.039	13.482	10	1.44E+02	3.14E+02	5.93E+02	5	4	5
358	6.038	13.406	10	1.00E+02	2.15E+02	4.07E+02	5	4	4
359	6.041	13.323	10	6.07E+01	1.31E+02	2.48E+02	3	2	3
360	6.145	13.753	10	4.16E+02	8.88E+02	1.68E+03	6	6	7
361	6.165	13.823	10	4.31E+02	9.22E+02	1.75E+03	6	6	7
362	6.119	13.900	10	9.65E+02	1.69E+03	3.38E+03	6	6	7
417	5.881	12.714	7	8.95E-05	4.59E-02	6.57E-02	1	1	1
442	5.998	14.225	8	2.22E+01	2.61E+01	5.95E+01	2	1	2
443	5.724	13.641	8	3.06E+00	6.37E+00	1.22E+01	1	1	1
444	5.772	13.525	8	4.29E+01	1.14E+02	2.06E+02	2	1	3
445	5.724	13.585	8	4.81E+00	1.24E+01	2.25E+01	1	1	1
446	5.932	13.871	8	4.13E+02	1.07E+03	1.94E+03	6	6	7
447	5.920	13.941	8	2.45E+02	8.70E+02	1.49E+03	6	5	6
448	5.927	13.817	8	6.87E+02	1.52E+03	2.86E+03	6	6	7

4 rounds at aimpoint (4.90, 13.40)

0	0.000	0.000	0	0.00E+00	0.00E+00	0.00E+00	1	1	
---	-------	-------	---	----------	----------	----------	---	---	--

4 rounds at aimpoint (4.90, 13.40)

84	4.595	13.057	10	0.00E+00	2.54E+00	3.63E+00			1
85	4.610	13.426	10	0.00E+00	6.36E+01	9.09E+01			2
89	4.604	13.250	10	9.58E-01	1.47E+03	2.10E+03			7
189	5.211	12.855	7	7.35E-03	3.62E+02	5.17E+02			5
313	4.617	13.310	10	4.03E-01	8.26E+02	1.18E+03			6
316	4.659	13.174	10	0.00E+00	3.37E+01	4.81E+01			2
419	5.264	13.099	7	0.00E+00	2.25E-03	3.21E-03			1
439	5.211	12.851	8	7.88E-03	3.68E+02	5.26E+02			5

Case 2a: Protected (Eye,
Respiratory Exposure)
Case 2b: Protected (Skin
Exposure)

APPENDIX H

TOE INFORMATION

A. Heavy Brigade, Forward Maneuver Battalion and Brigade Support Area, Movement to Contact

Table H-1. Heavy Brigade FM & BSA Movement to Contact

TOE #	Unit
44177L000, modified	Air Defense Arty Battery
63006L000	Forward Support BN HQ&HQ Detachment
42004L100	FSB Supply Co
43009L000	FSB Ordnance Co
08058L100	FSB Medical Co
05336L000	FSB Engineer BN HHQ
05337L000, modified	FSB Eng Co 1, Eng Co 2, Eng Co 3
06366L200, modified	FSB Field Arty Bn HHB
06367L200	Field Arty Batteries 1, 2 & 3

Notes:

- FLD TRN: In brigade with FSB
- CBT TRN: In battalion near rear
- MAINT: In battalion near rear
- In BSA: BDE HHC; FSB; FLD TRN

B. Heavy Brigade, Brigade Support Area, Offense and Defense

Table H-2. Heavy Brigade BSA Offense/Defense

TOE #	Unit
44177L000, modified	Air Defense Arty Battery
63006L000	Forward Support BN HQ&HQ Detachment
42004L100	FSB Supply Co
43009L000	FSB Ordnance Co
08058L100	FSB Medical Co
05336L000	FSB Engineer BN HHQ
05337L000, modified	FSB Eng Co 1, Eng Co 2, Eng Co 3
06366L200, modified	FSB Field Arty BN HHB
06369L100	Service Battery

Notes:

- FLD TRN: In brigade FSA
- CBT TRN: In battalion rear area
- MAINT: In battalion rear area

C. Heavy Brigade, Forward Maneuver Battalion, Defense

Table H-3. Heavy Brigade FM Defense

TOE #	Unit
44177L000, modified	Air Defense Arty Battery(-)
05337L000, modified	Eng Co 1
06366L200, modified	Field Arty BN HHB
06367L200	Field Arty Battery 1

Notes:

- CO TN: In company rear area
- CBT TN: In battalion rear area

Assumptions:

No effort has been made to show the support elements (maint, supply, medic, and mess) that would accompany the tank company when it joined the mech TF and the rifle company that departed, because the total numbers of vehicles and personnel would be the same for all practical purposes.

The artillery battalion CP has been arbitrarily placed in the TF area as representative of brigade assets that would be located in the TF area. The number of icons could be larger or smaller, depending on terrain and mission.

D. Heavy Brigade, Forward Maneuver Battalion, Offense

Table H-4. Heavy Brigade FM Offense

TOE #	Unit
44177L000, modified	Air Defense Arty Battery(-)
05337L000, modified	Eng Co 1
06366L200, modified	Field Arty BN HHB
06367L200	Field Arty Battery 1

Notes:

- CO TN: In company rear area
- CBT TN: In battalion rear area

Assumptions:

No effort has been made to show the support elements (maint., supply, medic., and mess.) that would accompany the tank company when it joined the mech TF and the

rifle company that departed, because the total numbers of vehicles and personnel would be the same for all practical purposes.

The artillery battalion CP has been arbitrarily placed in the TF area as a representative of brigade assets that would be located in the TF area. The number of icons could be larger or smaller depending on terrain and mission.

E. Light Infantry Brigade

TOE information was not found during the documentation process for the Light Infantry Brigade.

F. Support Brigade

Table H-5. Support Brigade

TOE #	Unit
42447L-010	QM Supply Co
42414L	FSC
43209L	Direct Support Maint Co
55718LL	Lt Maint Co
63426L	HHD CSB
9483L	DS Ammo Co
43007L	Light Ord Maint Co
43008L	Heavy Ord Maint Co
09008L100	Ord Missile Maint
42007L100	Supply & Service Co
0857L100	Med Co

APPENDIX I

DATA PROCESSING

A. Input Data Overview

This appendix details the inputs of the BioStrike and VLSTRACK models, used during the production of AMedP-8 Chemical. Figure I-1 demonstrates the flow of data that led to casualty estimates. Agent, munitions, and meteorological data were used by the IDA variant of VLSTRACK, GRIDGEN, to model the agent cloud. This agent cloud was then input into BioStrike and, together with attack points and troop data files, was used by BioStrike to determine the chemical agent exposure to individuals in each AMedP-8 scenario.

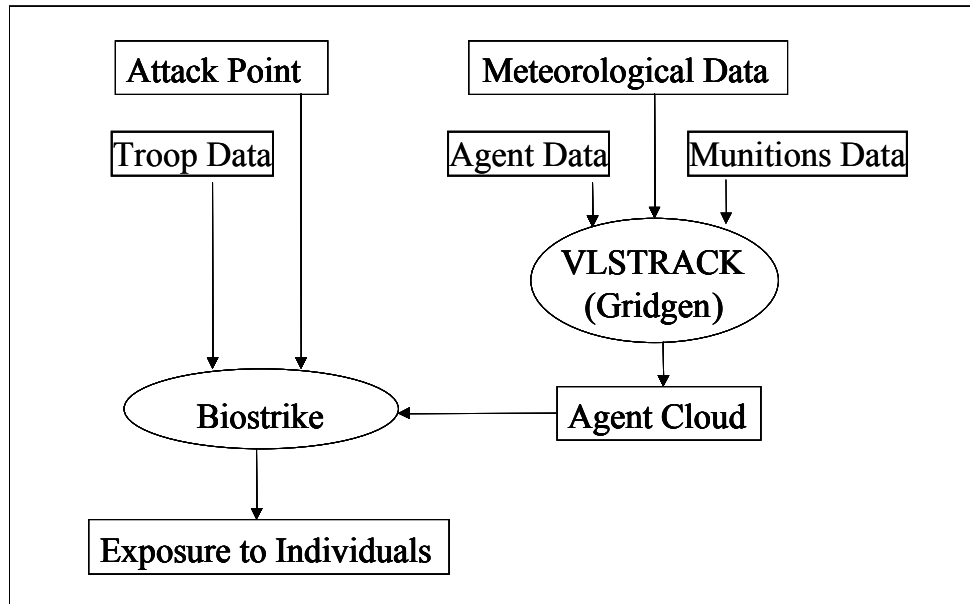


Figure I-1. Data Processing Overview

B. BioStrike Inputs

1. Troop Data

The following input files were used to enter troop data into BioStrike. Each file pertains to one of seven scenarios, as explained in Table I-1. Each file includes grid point numbers, the x,y coordinates for each grid point, and number of troops at that location. The troop files were called POSTM55.TRP, POSTM64.TRP, POSTM74.TRP, POSTM81.TRP, POSTM82.TRP, POSTM83.TRP, and POSTM97.TRP. POSTM81.TRP contains the troop data for the Heavy Brigade in Movement to Contact, without a specific targeted area. Note that grid point numbers correspond to icon numbers for these scenarios.

Table I-1. Scenario Labels for Troop Files

LABEL	UNIT TYPE	AREA TARGETED	MISSION
83	Heavy Brigade	Forward Maneuver Battalions	Movement to Contact
97	Heavy Brigade	Forward Maneuver Battalions	Offense
74	Heavy Brigade	Forward Maneuver Battalions	Defense
82	Heavy Brigade	Brigade Support Area	Movement to Contact
55	Heavy Brigade	Brigade Support Area	Offense or Defense
64	Support Brigade	N/A	Support
67	Light Infantry Brigade	N/A	Defense

2. Attack Points

For each scenario, attack points were determined via the optimization process described in Section III.B.2. These attack points have been tabulated for the protected and unprotected cases of each scenario/agent combination. For each attack, the table provides information on the x,y coordinates of the attack point, the particular type of munitions used, the number of rounds fired, and the height of release of the agent in that attack. Tables I-2 through I-8 are organized by tactical scenario.

Table I-2. VX, GB, and HD Aimpoints: Heavy Brigade, Forward Maneuver, Movement to Contact

		Heavy Brigade, Forward Maneuver, Movement to Contact													
		VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release													
Munitions	# of rounds			X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind
				Unprotected		Protected		Unprotected		Protected		Unprotected		Protected	
152mm Artillery	18	15m	0m	18.70	20.30	17.70	20.30	20.25	34.00	10.55	43.45	10.55	43.65	13.35	41.15
MRLS	240	15m	0m	20.60	34.70	20.60	34.70	20.55	35.35	20.60	33.25	17.80	21.15	21.25	45.55
MRLS	720	15m	0m	20.45	35.30	20.45	35.00	18.30	20.15	20.70	32.70	18.25	24.40	18.25	20.00
250kg Bomb	2	70m	0m	17.95	20.60	17.95	20.60	20.45	34.80	16.50	23.00	20.40	33.65	20.40	33.65
250kg Bomb	12	70m	0m	18.75	20.30	18.75	20.30	18.10	20.10	20.45	33.25	20.55	33.75	20.55	33.60
250kg Bomb	24	70m	0m	17.65	20.15	17.65	20.15	18.75	20.25	20.45	33.25	20.55	33.85	20.55	33.90
250kg TBM	1	500m	0m	18.40	35.30	17.90	20.15	17.55	20.30	10.55	35.15	20.40	33.80	20.30	33.45
500kg TBM	2	800m	0m	17.40	31.40	20.70	33.85	17.80	20.10	20.75	44.55	20.50	34.10	6.30	44.15
500kg TBM	4	800m	0m	17.75	46.95	18.15	20.15	17.95	21.45	20.45	33.00	20.50	34.05	6.10	44.15

Table I-3. VX, GB, and HD Aimpoints: Heavy Brigade, Brigade Support Area, Movement to Contact

Heavy Brigade, Brigade Support Area, Movement to Contact															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release													
				X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind
				Unprotected		Protected		Unprotected		Protected		Unprotected		Protected	
152mm Artillery	18	15m	0m	17.60	15.80	17.60	15.80	17.60	15.45	17.80	18.50	17.55	14.85	10.75	19.65
MRLS	240	15m	0m	17.70	16.20	17.70	16.15	17.80	16.80	17.90	14.55	17.85	19.55	17.75	17.35
MRLS	720	15m	0m	17.85	16.85	17.90	16.40	17.95	17.90	17.60	15.30	18.25	20.00	18.75	18.10
250kg Bomb	2	70m	0m	17.65	17.60	17.65	17.60	17.65	16.15	17.35	14.75	17.60	15.00	17.65	14.90
250kg Bomb	12	70m	0m	17.60	18.20	17.60	18.20	18.80	19.05	17.70	14.75	17.65	15.20	17.65	15.05
250kg Bomb	24	70m	0m	17.65	20.00	17.65	20.00	17.65	19.55	17.65	18.45	17.65	15.50	17.65	15.40
250kg TBM	1	500m	0m	17.90	20.00	17.65	16.30	17.60	17.00	17.70	18.65	17.65	15.20	17.55	14.95
500kg TBM	2	800m	0m	19.65	19.90	17.95	15.25	17.75	19.95	13.75	20.00	17.95	15.45	14.60	15.50
500kg TBM	4	800m	0m	18.30	20.00	18.00	15.65	17.75	20.00	17.10	14.90	17.50	15.95	14.20	16.15

Table I-4. VX, GB, and HD Aimpoints: Heavy Brigade, Forward Maneuver, Offense

Heavy Brigade, Forward Maneuver, Offense															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release													
				X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind
				Unprotected		Protected		Unprotected		Protected		Unprotected		Protected	
152mm Artillery	18	15m	0m	10.90	43.55	10.90	43.55	17.60	15.60	9.10	48.30	7.85	48.60	9.10	46.85
MRLS	240	15m	0m	10.75	43.80	10.75	43.75	10.80	44.50	9.20	48.30	9.00	52.00	9.20	48.50
MRLS	720	15m	0m	10.80	44.50	10.90	44.10	8.50	50.00	10.70	49.90	10.70	52.00	9.05	50.95
250kg Bomb	2	70m	0m	9.10	50.60	9.10	50.60	10.70	43.80	8.90	48.20	7.75	48.65	10.60	42.70
250kg Bomb	12	70m	0m	8.95	51.85	8.95	51.85	9.00	50.50	10.70	50.70	10.70	42.80	10.65	42.70
250kg Bomb	24	70m	0m	9.15	52.00	9.15	52.00	8.90	51.80	10.70	50.90	10.70	43.10	10.65	42.90
250kg TBM	1	500m	0m	10.40	52.00	10.65	43.95	9.00	50.50	9.30	45.80	10.90	42.85	10.50	42.70
500kg TBM	2	800m	0m	8.65	52.00	10.75	43.10	8.90	51.80	12.60	49.70	10.60	43.25	6.10	50.00
500kg TBM	4	800m	0m	9.65	51.40	10.20	48.50	8.80	53.90	8.00	48.30	10.35	47.55	11.25	42.25

Table I-5. VX, GB, and HD Aimpoints: Heavy Brigade, Forward Maneuver, Defense

Heavy Brigade, Forward Maneuver, Defense															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release													
				X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind	X-wind	Upwind
				Unprotected		Protected		Unprotected		Protected		Unprotected		Protected	
152mm Artillery	18	15m	0m	10.80	38.70	10.80	38.70	10.80	38.20	6.70	41.20	8.50	47.20	6.75	41.10
MRLS	240	15m	0m	10.60	38.90	10.60	38.90	10.70	39.60	11.10	37.60	10.75	44.65	10.75	39.80
MRLS	720	15m	0m	10.55	39.55	10.55	39.55	10.80	40.50	10.70	37.90	11.20	52.65	10.55	39.60
250kg Bomb	2	70m	0m	10.70	40.30	10.70	40.30	10.90	39.20	13.30	48.60	8.35	47.40	8.35	47.40
250kg Bomb	12	70m	0m	10.70	41.10	10.70	41.10	10.70	40.50	10.70	37.70	10.70	37.75	10.65	37.75
250kg Bomb	24	70m	0m	10.70	41.85	10.70	41.85	10.70	41.90	10.50	37.60	10.55	38.15	10.70	37.95
250kg TBM	1	500m	0m	10.90	59.80	11.00	38.55	10.80	40.50	13.40	48.70	10.85	44.65	13.50	48.75
500kg TBM	2	800m	0m	10.50	58.80	8.95	47.50	10.60	42.10	8.30	50.80	10.60	38.55	8.05	50.85
500kg TBM	4	800m	0m	11.70	59.90	10.50	39.45	11.60	52.00	8.60	46.90	11.35	37.95	11.35	37.95

Table I-6. VX, GB, and HD Aimpoints: Heavy Brigade, Brigade Support Area, Offense and Defense

Heavy Brigade, Brigade Support Area, Offense and Defense															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release		X-wind		Upwind		X-wind		Upwind		X-wind		Upwind	
				Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected
152mm Artillery	18	15m	0m	15.50	19.45	15.50	19.45	15.50	19.10	15.60	18.40	15.65	18.45	16.10	16.60
MRLS	240	15m	0m	15.40	19.80	15.45	19.80	16.00	18.90	16.40	16.70	15.90	19.80	15.40	20.00
MRLS	720	15m	0m	16.20	18.85	16.05	20.00	16.20	20.00	15.40	18.90	15.80	20.00	15.95	19.35
250kg Bomb	2	70m	0m	16.10	18.25	16.10	18.25	15.50	19.70	16.30	16.50	15.50	18.60	15.45	18.55
250kg Bomb	12	70m	0m	15.90	19.60	15.90	19.60	15.90	20.00	15.50	18.40	15.40	18.70	15.45	18.55
250kg Bomb	24	70m	0m	15.90	19.45	15.90	19.45	15.90	19.60	15.80	16.90	15.40	19.05	15.35	18.90
250kg TBM	1	500m	0m	15.50	19.70	15.50	19.00	15.50	20.00	15.60	18.40	15.60	18.75	16.20	16.70
500kg TBM	2	800m	0m	14.60	20.00	15.45	19.15	15.60	20.00	15.70	18.10	15.25	19.30	15.55	17.45
500kg TBM	4	800m	0m	15.60	19.90	15.20	20.00	15.60	20.00	15.20	18.60	15.25	19.60	15.55	17.45

Table I-7. VX, GB, and HD Aimpoints: Support Brigade

Support Brigade															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release		X-wind		Upwind		X-wind		Upwind		X-wind		Upwind	
				Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected
152mm Artillery	18	15m	0m	17.30	24.95	17.30	24.95	17.40	24.80	16.30	23.50	17.30	24.00	12.30	25.05
MRLS	240	15m	0m	17.35	25.50	17.50	25.65	17.50	26.10	17.40	24.30	17.55	28.10	17.50	25.90
MRLS	720	15m	0m	17.70	26.20	17.75	25.75	18.00	25.60	17.30	24.60	17.90	30.00	17.65	25.10
250kg Bomb	2	70m	0m	17.35	27.10	17.35	27.10	17.40	25.70	12.20	22.30	17.40	24.40	17.30	24.70
250kg Bomb	12	70m	0m	17.35	28.20	17.35	28.20	17.20	26.90	17.40	24.00	17.35	24.45	17.35	24.35
250kg Bomb	24	70m	0m	17.35	29.20	17.35	29.20	17.20	28.10	17.50	24.00	17.35	24.55	17.35	24.65
250kg TBM	1	500m	0m	16.80	30.00	17.35	25.50	17.30	26.70	16.50	27.50	17.30	24.55	17.35	24.20
500kg TBM	2	800m	0m	19.30	30.00	17.70	24.20	17.50	28.60	10.60	24.40	17.65	24.75	12.10	22.60
500kg TBM	4	800m	0m	17.95	29.00	17.55	25.50	17.70	29.00	18.70	25.10	17.15	25.20	11.70	23.25

Table I-8. VX, GB, and HD Aimpoints: Light Infantry Brigade

Light Infantry Brigade															
Munitions	# of rounds	VX / HD	GB	VX Aimpoints				GB Aimpoints				HD Aimpoints			
		Height of Release		X-wind		Upwind		X-wind		Upwind		X-wind		Upwind	
				Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected	Unprotected	Protected
152mm Artillery	18	15m	0m	5.60	14.20	5.60	14.20	5.90	13.90	5.90	13.10	6.00	14.55	4.60	14.55
MRLS	240	15m	0m	5.70	14.65	5.70	14.65	5.70	15.20	5.70	13.10	5.70	17.85	5.75	15.05
MRLS	720	15m	0m	5.50	15.15	5.65	14.75	5.50	16.20	5.70	14.40	6.15	18.00	5.55	15.15
250kg Bomb	2	70m	0m	5.85	16.40	5.85	16.40	5.80	15.00	5.30	16.30	5.50	14.20	5.65	13.35
250kg Bomb	12	70m	0m	5.65	17.35	5.65	17.35	5.70	16.30	5.80	12.90	5.65	13.25	5.65	13.35
250kg Bomb	24	70m	0m	5.65	18.00	5.65	18.00	5.70	17.30	5.80	14.30	5.75	14.65	5.65	13.80
250kg TBM	1	500m	0m	6.40	18.00	6.40	18.00	5.80	16.40	6.00	13.00	6.00	14.55	5.85	15.00
500kg TBM	2	800m	0m	7.65	18.00	5.70	13.55	5.30	17.50	4.90	12.10	5.70	13.90	4.90	13.40
500kg TBM	4	800m	0m	6.25	17.95	5.90	15.70	5.30	18.00	7.60	13.10	5.80	14.70	4.90	13.40

C. VLSTRACK Inputs

1. Agent Characteristics

Table I-9 describes or defines the agent characteristics used in VLSTRACK to model the dissemination of chemical agent. During the production of casualty estimates for AMedP-8 Chemical, the values in Table I-10 were used as VLSTRACK inputs for chemical agent properties. In most cases, these values correspond to VLSTRACK defaults. According to VLSTRACK documentation, the physical properties for agents addressed by the model were listed in a file named VLSAGN.PAR.¹

Table I-9. VLSTRACK Agent Characteristics²

Characteristic	Definition
Bulk Density (g/cm ³)	The density for neat chemical agents in liquid form.
Dissemination Efficiency (%)	The percent of the bulk munition fill that is effectively dispersed into the atmosphere (the remainder is destroyed by the detonation).
Median Effective Dose (mg)	Typically referred to as ED ₅₀ ; the dose required to cause effects in 50% of the population exposed to that dose. For chemical agents, ED ₅₀ is generally measured in milligrams (mg).
Probit Slope	Expressed in base-10, the slope of the curve used to represent human response to doses of harmful substances; in this case, the y-axis is the administered dose, and the x-axis is the probability of response.
Freezing Temperature (°C)	The temperature at which a material freezes; same as Freezing Point.
Molecular Weight (g/mole)	Mass in grams of one mole of molecules; the same as molar mass.
Volatility Coefficients	With molecular weight and air temperature data, used to calculate volatility of persistent chemical agent.
Heat of Vaporization (cm ² /s ²)	Heat of vaporization is energy absorbed during the change of a mole of liquid to a vapor without a change in temperature.
Viscosity (g/cm-s)	The tendency of a fluid to resist internal flow without regard to its density.
Surface Tension (dyne/cm)	The tangential force acting at the interface between a liquid and air (or, more correctly, its own vapor) caused by the difference in attraction between liquid molecules and gaseous molecules. (Also called surface energy, surface free energy, capillary forces, interfacial tension.) ³
Agent Vapor Diffusivity in Air (cm ² /s)	The rate at which agent vapor diffuses.
Droplet Spread Factor	The ratio of droplet diameter for a droplet on the ground to that of a droplet falling at its terminal velocity in the air.

¹ Bauer et al., 1995

² Unless noted otherwise, the definitions of data categories provided here are taken from Bauer, op. cit., pp. 3-79 to 3-85.

³ msglossary.allenpress.com/glossary/browse

Table I-10. VLSTRACK Agent Data

Agent Name	Agent Abbr.	Type Category	Bulk Density (g/cm ³)	Dissemination Efficiency	LD ₅₀ (mg-min/m ³)	Probit Slope	Freezing Temp (C)	ATP-45 NBC Message Term	Molecular Weight (g/mole)	Volatility Coefficient 1	Volatility Coefficient 2	Volatility Coefficient 3	Heat of Vaporization (cm ² /s ²)	Viscosity (g/cm-s)	Surface Tension (dyne/cm)	Agent Vapor Diffusivity in Air (cm ² /s)	Droplet Spread Factor
VX	VX	1	1.01	60	30	6.30	-50	'VX'	267.4	7.28	2072.1	172.5	3.39E+09	0.123	32.0	0.033	3.5
GB (Sarin)	GB	1	1.09	60	70	12.00	-57	'GB'	140.1	7.48	1773.8	227.9	3.35E+09	0.014	28.8	0.059	3.5
HD (Mustard)	HD	1	1.27	60	1000	5.70	9	'HD'	159.1	7.47	1935.5	204.2	3.89E+09	0.045	43.2	0.057	3.5

2. Munitions Characteristics

During the production of casualty estimates for AMedP-8 Chemical, the values in Table I-11 were used as VLSTRACK inputs for munitions properties. In many cases, these values correspond to VLSTRACK defaults. According to VLSTRACK documentation, the physical properties for munitions used by the model were listed in a file named VLSMUN.PAR.⁴ These properties are defined in Table I-12. For each munitions type, Typical Height of Burst is also listed in the VLSMUN.PAR file, but has been omitted from Table I-11. Typical Height of Burst values differed from VLSTRACK default values and can be found in Tables I-2 through I-8. For each agent/munitions combination, SAIC optimized height of burst; their methodology was not available for documentation.

Values in the category Typical Number of Munitions in Attack also differed from VLSTRACK default values. In Table I-11, one, two, or three values are listed for each munition type, indicating the number of attacks conducted with that munitions type in AMedP-8 Chemical. For example, three attacks were conducted with 250kg bombs; one attack employed 2 rounds (light attack), another employed 12 rounds (moderate attack), and a third employed 24 rounds (heavy attack). However, only one attack was considered using the 250kg TBM, employing one round.

⁴ Bauer et al., 1995

Table I-11. VLSTRACK Delivery System and Munitions Data

Munition Name	Fill Agent Abbr.	Munition Type Category	Typical Number of Munitions in Attack	Typical Firing Rate (rds/min)	Fill Weight (kg) (at 1.0 g/cm ³)	ATP-45 NBC Message Munition Term	Point Source Horizontal Cloud Sigma (m)	Point Source Vertical Cloud Sigma (m)	Downrange Target Standard Deviation (m)	Crossrange Target Standard Deviation (m)	Neat Agent Droplet Mass-Median Diameter (MMD) (microns)	Thickened Agent Droplet Mass-Median Diameter (MMD) (microns)	Geometric Droplet Distribution Sigma	Line Source Cloud Sigma (m)	Line Source Length (m)	Line Source Fall Angle (deg)
152mm Artillery	GB/VX/HD	1	18	10	4	'SHL'	3	1.3	100	100	150	750	1.7	N/A	N/A	N/A
MRLS (122mm Rocket)	GB/VX/HD	1	240/ 720	0	9	'SHL'	2	1.2	100	100	150	750	1.7	N/A	N/A	N/A
250kg Bomb	GB/VX/HD	2	002/ 012/ 024	4	75	'BOM'	14	6	150	50	500	2500	1.7	8	50	45
500kg TBM	GB/VX/HD	3	002/ 004	1	500	'MSL'	6	N/A	500	500	100	500	1.7	N/A	200	45
250kg TBM	GB/VX/HD	3	1	1	250	' '	6	N/A	999	999	100	500	1.7	N/A	200	45

Table I-12. Delivery System and Munitions Characteristics⁵

Characteristic	Definition
Fill Weight (kg)	The weight of the agent fill contained in the munitions, at 1.0 g/cm ³ . For given agent, fill weight is multiplied by bulk density to determine the actual weight of agent used.
Height of Burst (m)	The altitude at which munitions explode or otherwise release agent.
Firing Rate (rounds/min)	For munitions typically delivered in volleys, such as artillery shells, the rate at which they are fired at their target.
Number of Munitions in Attack	The number of munitions expected in a single volley.
Downrange and Cross-range Target Standard Deviations (m)	These values represent the accuracy of detonation coordinates relative to the target.
Droplet Mass-Median Diameter (microns)	For chemical agents, this value is typically a function of the munition fuzing and similar among munitions of a given type.
Droplet Distribution Sigma	For chemical agents, this value is typically a function of the munition fuzing and similar among munitions of a given type.
Line Source Length (m)	The length of the line along which the payload of a large delivery system (such as bombs or missiles) is released, if release occurs above ground at high velocity, and if the munition is appropriately fuzed.
Line Source Fall Angle (degrees)	The angle between the horizontal and the line along which agent is released.
Cloud Sigma	Values used to represent the trivariate Gaussian distribution of mass away from the detonation point. For single point releases, these values are defined for both vertical and horizontal spread. For line sources, a single value is used to represent the radial distribution away from the axis of the line source.

⁵ The definitions provided here are taken from Bauer, op. cit., pp. 3-76 to 3-78.

3. Meteorology Characteristics

In AMedP-8 Chemical, worst-case meteorological conditions were assumed during the calculation of casualty estimates.⁶ Table I-13 defines the meteorology characteristics used by VLSTRACK to model weather conditions. Table I-14 lists the wind speed, temperature, local attack time, and cloud cover information used for each agent-munitions combination. In addition to the meteorology characteristics listed in Table I-13, VLSTRACK also requires latitude and longitude coordinates to calculate the sun angle.

Table I-13. VLSTRACK Meteorology Characteristics⁷

Characteristic	Definition
Wind Direction	In degrees true North (DTN), where 0 DTN is to the North (from the South), 90 DTN is to the East (from the West), 180 DTN is to the South (from the North), and 270 DTN is to the West (from the east).
Wind Speed (km/hr)	For wind speeds less than 1.8 km/hr, VLSTRACK uses a wind meander approach where it assigns a random wind direction for each time step.
Air Temperature (°C)	A negative air temperature is subtracted from 50 to result in a number from 51 to 99.
Degree of Cloud Cover	In VLSTRACK, this is represented by selecting from “clear,” “partly cloudy,” and “overcast.”
Pasquill Stability Category	This is a characterization of atmospheric stability and ranges from very stable (category 7) to very unstable (category 1). If the user sets the stability category to 0, the program will calculate atmospheric stability from other meteorological inputs, time of day, and location on the globe.

⁶ Please refer to Section II.B.3 for an explanation of worst-case meteorological conditions.

⁷ Bauer et al., 1995

Table I-14. VLSTRACK Meteorology Data

Agent	Dissemination		Weather Conditions			
	Munition	Attack Intensity	Wind Speed	Temperature (Season)	Local Attack Time	Cloud Cover
GB	MRLS/Artillery Rounds	Light (x18)	3	16-25 ^o C (Autumn)	1900	Clear
		Mod. (x240)	6			
		Heavy (x720)	10			
	Bomb	Light (2x 250 kg)	4			
		Moderate (12 x 250 kg)	9			
		Heavy (24x 250 kg)	10			
	TBM	Light (1x 250 L)	8			
		Moderate (2x 500 L)	10			
		Heavy (4x 500 L)	12			
	VX	MRLS/Artillery Rounds	Light			
Moderate			8			
Heavy			8			
Bomb		Light	30	24-32 ^o C (Summer)	1900	Partly Cloudy
		Moderate	30			
		Heavy	30			
TBM		Light	4	5-12 ^o C (Winter)	0500	Clear
		Moderate	4			
		Heavy	6			
HD	MRLS/Artillery Rounds	Light	0	24-32 ^o C (Summer)	0500	Partly Cloudy
		Moderate	0			
		Heavy	2			
	Bomb	Light	22	24-32 ^o C (Summer)	1200	Clear
		Moderate	20			
		Heavy	20			
	TBM	Light	0	5-12 ^o C (Winter)	1200	Clear
		Moderate	0			
		Heavy	0			

APPENDIX J

DETERMINATION OF EFFECTIVE DOSE

A. Definitions and Variables

Effective Dose (ED): an estimate of the equivalent vapor exposure (or dosage) level which produces effects of severity corresponding to those produced by simultaneous exposure to two different types and/or forms of insult (i.e., liquid and aerosol)

ICT₅₀: the time-integrated agent vapor concentration that will produce severe effects in 50% of the exposed population; may refer to inhalation effects and/or percutaneous and eye exposures [measured in mg-min/m³]

ED₅₀: the liquid agent mass that will produce severe effects in 50% of the exposed population – assumes the typical population is represented by a 70 kg man assumed to have agent deposited over a 1 m² surface of the body [measured in mg/man]

ICT₅₀(GB/IH/V): median exposure values that cause serious effects from inhaling (IH) the vapor (V) form of GB; this is similar for inhalation and percutaneous (PC) exposures resulting from vapor concentrations of VX and HD

ED₅₀(GB/PC/L): median exposure values that cause serious effects from percutaneous (PC) exposure to the liquid (L) form of GB; this is similar for percutaneous exposures resulting from liquid concentrations of VX and HD

D(VX/IH/V): downwind exposure level from inhaling (IH) the vapor (V) form of VX

ED(GB/IH/V): calculated effective dose due to the inhalation (IH) of the vapor (V) form of GB which would produce corresponding effects as a result of exposure to both vapor and liquid insults

D_v: vapor dose (mg-min/m³)

D_l: liquid dose (mg/man)

D_{1v}: first period (1 min) vapor dose (mg-min/m³) as given by VLSTRACK

D_{2v}: second period (8 min) vapor dose (mg-min/m³) as given by VLSTRACK

D_{1l}: first period (1 min) liquid dose (mg/man) as given by VLSTRACK – *for conversion from VLSTRACK deposition values, multiply by 1m²/man*

D_{2l}: second period (8 min) liquid dose (mg/man) as given by VLSTRACK – *for conversion from VLSTRACK deposition values, multiply by 1m²/man*

D_{av}: first period vapor dose (mg-min/m³) as used in the DICE algorithm – *for protection available, equal to D_{1v} – applies to systemic (GB,VX) or respiratory, systemic and ocular (HD) exposure only*

D_{al}: first period liquid dose (mg/ m²*1m²/man) as used in the DICE algorithm – *for protection available, equal to D_{1l} – applies to systemic (GB,VX) or respiratory, systemic and ocular (HD) exposure only*

D_{bv}: combined first and second period VLSTRACK vapor dose (mg-min/m³) as used in the DICE algorithm – *for protection available, equal to D_{1v} + D_{2v}(1 – a) – applies to systemic (GB,VX) or skin (HD) exposure only*

- D_{bl} : combined first and second period VLSTRACK liquid dose ($\text{mg}/\text{m}^2 \cdot 1\text{m}^2/\text{man}$) as used in the DICE algorithm – *for protection available, equal to $D_{1l} + D_{2l}(1 - a)$* – applies to systemic (GB, VX) or skin (HD) exposure only
- F: factor which converts percutaneous vapor and liquid doses to effective inhalation doses
- (1– a): fraction (.93) of the body that is assumed to be unprotected by the mask and hood during the second period (prior to total protection by overgarments)

B. Notes

1. Estimates of performance are made as a function of dose level and postexposure time, so it is important to determine dose level for each agent.

2. An effective dose calculation is used when the agent insult takes more than one form and/or exposure to the agent produces multiple and varied effects (i.e., systemic/respiratory, ocular and skin). In addition, the effective dose formulation is used to put VX exposure in terms of GB exposure for reasonable comparison; this was necessary because at the time of document production, no VX sign and symptom information was available.

3. Effective dose calculations vary depending on whether protection is or is not available.

- a. If protection is assumed to be unavailable, only the battle dress uniform (BDU) is assumed with no overgarment protection; the BDU is assumed to offer no protective effect and personnel are exposed to both liquid and vapor forms of the agent.
- b. If protection is assumed to be available, it is assumed:
 - 1) During the first minute following the arrival of the agent cloud, personnel are not protected by any overgarments;
 - 2) During the following eight minutes, personnel are protected by wearing a mask (and the associated hood) which provides 100% inhalation and ocular protection, as well as protection for 7% of the skin;
 - 3) After nine minutes, personnel are protected from all forms of agent exposure by the complete overgarment at the MOPP 4 level; overgarment is assumed to be 100% effective in preventing exposure.

4. For the protection unavailable case, the vapor and liquid doses are assumed to be constant, so:

- a. $D_v = D_{1v} = D_{2v} = D_{av} = D_{bv}$
- b. $D_l = D_{1l} = D_{2l} = D_{al} = D_{bl}$

5. The breathing rate for all troops during the exposure period is assumed to be 15 l/min.

6. The following additional assumptions apply:
 - a. Exacerbation of 1st period exposure by protective gear trapping agent next to the skin during the 2nd and 3rd periods is not considered.
 - b. Encumbrance, heat stress, and possible skin irritation caused by wearing MOPP 4 gear are not considered.
 - c. Entire dosage received during the protection unavailable period is assumed to be short-term exposure (10 min or less).
 - d. Pickup of liquid agent by contact with the contaminated environment is not considered.

C. Human Response Calculations

The Institute for Defense Analyses calculated exposure data with Vapor, Liquid, and Solid Tracking (VLSTRACK) clouds used in BioStrike. They provided scenario-specific exposure data for GB, VX, and HD attacks to Pacific-Sierra Research Corporation (PSR). PSR used these values with the DICE algorithms (further described in Appendix L) to determine performance degradation, numbers of casualties over time, and fatalities. The equations below show the effective dose calculations both as they would be used with the VLSTRACK/BioStrike data and as the data was converted for use in the DICE algorithm.

VLSTRACK provides both vapor concentration clouds in mg-min/m³ and liquid deposition on a horizontal surface in mg/m² for chemical warfare agents. Clouds generated in VLSTRACK were utilized as inputs in BioStrike to determine the dose received by individuals in each formation. Effective vapor doses needed to be determined because the DICE algorithms were developed for use with vapor exposure only.

a. Effective Dose Calculation for GB

To determine the effective dose for GB, the following equations were used for the unprotected and protected cases, respectively.

$$ED_{\text{GB w/o protection}} = D_v + D_v F_a + D_l F_b$$

$$ED_{\text{GB w/protection}} = D_{1v}(1 + F_a) + D_{2v}(1 - a)F_a + D_{1l}F_b + D_{2l}(1 - a)F_b$$

F_a and F_b are factors for converting percutaneous GB vapor and liquid exposures to comparable inhalation values for use in the DICE algorithm. The ICt_{50} and ED_{50} values can be determined from Figures J-1 and J-2, shown below. The following are the calculated values of F_a and F_b :

$$F_a = ICt_{50}(\text{GB/IH/V})/ICt_{50}(\text{GB/PC/V}) = 35/8000 = .0044$$

$$F_b = ICt_{50}(\text{GB/IH/V})/ED_{50}(\text{GB/PC/L}) = 35/1000 = .035$$

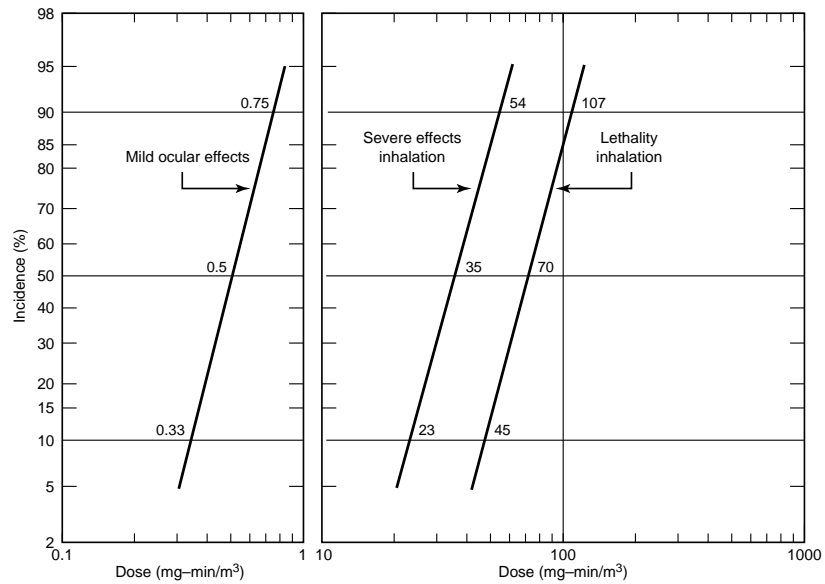


Figure J-1. Inhalation and Ocular Dose response for GB vapor exposure endpoints¹

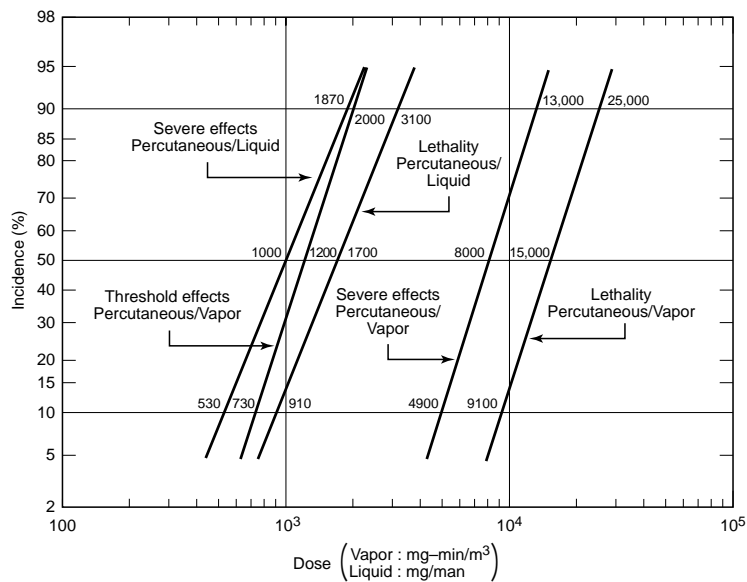


Figure J-2. Percutaneous Dose response for GB vapor and liquid exposure endpoints

For GB, the AMedP-8 working group decided to neglect liquid exposure. Although it is not specifically stated in the original documents, we believe this was due to the liquid exposure concentration of the generated GB clouds being below the minimum VLSTRACK measurable concentration values. Neglecting GB liquid exposure results in the following equation:

¹ All dose response curve graphs from McClellan et al., 1998.

$$ED_{GB \text{ w/o protection}} = D_v (1 + F_a)$$

$$ED_{GB \text{ w/protection}} = D_{lv} + [D_{lv} + D_{2v}(1 - a)]F_a$$

In order to make the IDA data from Biostrike usable in the PSR model, the equation above needs to be converted to the Biostrike output format:

Without Protection:

$$ED_{GB \text{ w/o protection}} = D_{av} (1 + F_a)$$

With Protection:

$$ED_{GB \text{ w/protection}} = D_{av} + D_{bv}F_a$$

$$ED_{GB \text{ w/protection (0-1 min, inhalation)}} = D_{av}$$

$$ED_{GB \text{ w/protection (0-9 min, percutaneous)}} = D_{bv}F_a$$

This effective dose is used to determine the severity of all symptom categories for GB exposure.

2. Effective Dose Calculation for VX

To determine the effective dose for VX, as previously discussed, the VX values must first be converted to equivalent vapor doses for GB. The following equations were used for the unprotected and protected cases respectively.

$$ED_{VX \text{ w/o protection}} = D_v(F_c + F_d) + D_lF_e$$

$$ED_{VX \text{ w/protection}} = D_{lv}(F_c + F_d) + D_{2v}(1 - a)F_d + D_{lv}F_e + D_{2l}(1 - a)F_e$$

F_c , F_d , and F_e are factors for converting inhalation VX and percutaneous VX vapor and liquid exposures to comparable GB inhalation values for use in the DICE algorithm. Please note that the equation for F_c as given in the reference is:

$$F_c = ICt_{50} (GB/IH/V)/ICt_{50} (GB/PC/L) = 35/25 = 1.4$$

Upon review, it became apparent that there was a typographical error in the document. The correct equation appears to be the one given below. The numerical values above are correct for the calculation of F_c ; only the reference to the ICt_{50} of percutaneous GB in liquid form is incorrect. Rather, the equation should convert the ICt_{50} of inhaled vapor VX. The ICt_{50} and ED_{50} values can be determined from Figures J-3 and J-4, shown below. The following are the calculated values of F_c , F_d , and F_e :

$$F_c = ICt_{50} (GB/IH/V)/ICt_{50} (VX/IH/V) = 35/25 = 1.4$$

$$F_d = ICt_{50} (GB/IH/V)/ICt_{50} (VX/PC/V) = 35/25 = 1.4$$

$$F_e = IC_{t50} (GB/IH/V)/ED_{50} (VX/PC/L) = 35/5 = 7$$

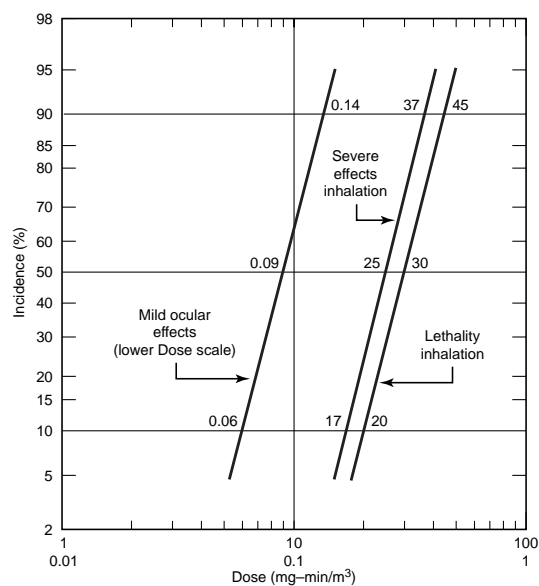


Figure J-3. Inhalation and Ocular Dose response for VX vapor exposure endpoints

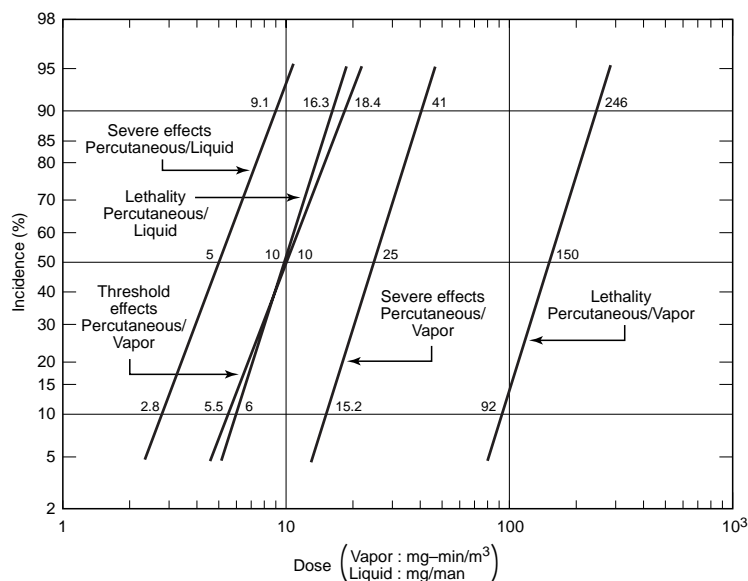


Figure J-4. Percutaneous Dose response for VX vapor and liquid exposure endpoints

In order to make the IDA data from Biostrike usable in the PSR model, the equation above needs to be converted to the Biostrike output format:

Without Protection:

$$ED_{VX \text{ w/o protection}} = D_{av}(F_c + F_d) + D_{al}F_e$$

Without Protection:

$$ED_{VX \text{ w/protection}} = D_{av}F_c + D_{bv}F_d + D_{bl}F_e$$

$$ED_{VX \text{ w/protection (0-1 min, inhalation)}} = D_{av}F_c$$

$$ED_{VX \text{ w/protection (0-9 min, percutaneous)}} = D_{bv}F_d + D_{bl}F_e$$

These effective dose calculations determine the severity of all symptom categories for VX in terms of the equivalent GB exposure; in order to calculate the equivalent injury severity category, the ED_{VX} should be entered into the GB injury severity table (Table IV-1), vice the VX injury severity table (Table IV-2). In addition, these values are used in the DICE algorithms for GB as if representing GB vapor dosages.

3. Effective Dose Calculation for HD

Because of its effects on various systems, the effective dose calculations for HD are more complex. For the HD cases, vapor dose is assumed to be the only cause for eye effects; liquid contact with the eyes is neglected. In addition, only vapor dose is assumed to cause respiratory, systemic, and ocular damage; both vapor dose and liquid deposition are assumed to cause skin damage. The following equations were used for the unprotected and protected cases respectively.

$$ED_{HD \text{ w/o protection SK}} = D_v + D_l F_f$$

$$ED_{HD \text{ w/o protection SY, RE, OC}} = D_v$$

$$ED_{HD \text{ w/protection SK}} = D_{lv} + D_{2v}(1 - a) + D_{ll}F_f + D_{2l}(1 - a)F_f$$

$$ED_{HD \text{ w/protection SY, RE, OC}} = D_{lv}$$

Upon review, it became apparent that the effective dose equations given in Anno, et al. applied to skin exposure only, despite a typographical error stating that the skin effective dose without protection equation given above applied to skin, ocular, and respiratory/systemic effects. Because only vapor exposure results in ocular, systemic, and respiratory effects, the effective dose with protection for ocular and systemic/respiratory effects is due solely to the vapor exposure in the first minute before the mask is donned, as shown above.

F_f is the factor used for converting percutaneous HD liquid effects into percutaneous HD vapor effects for use in the DICE algorithm. The ICt_{50} and ED_{50} values can be determined from Figures J-5 and J-6, shown below. The following is the calculated value of F_f :

$$F_f = ICt_{50} (HD/PC/V)/ED_{50} (HD/PC/L) = 2000/1400 = 1.4$$

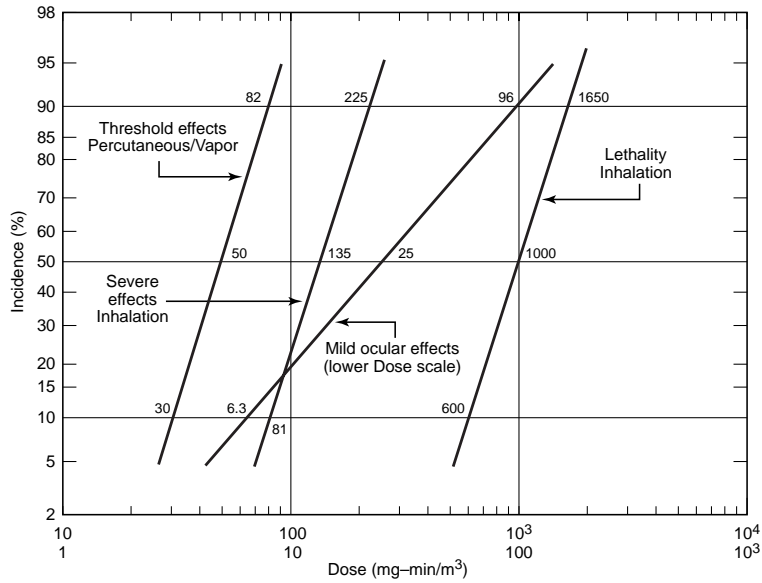


Figure J-5. Inhalation and Ocular Dose response for HD vapor exposure endpoints

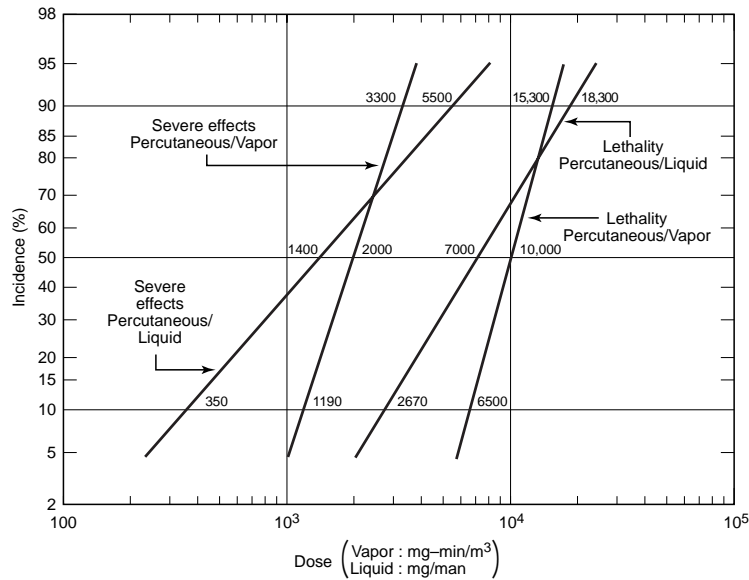


Figure J-6. Percutaneous Dose response for HD vapor and liquid exposure endpoints

In order to make the IDA data from Biostrike usable in the PSR model, the equation above needs to be converted to the Biostrike output format:

Without Protection:

$$ED_{\text{HD w/o protection (SY, RE, OC)}} = D_{\text{av}}$$

$$ED_{\text{HD w/o protection (percutaneous/SK)}} = D_{\text{av}} + D_{\text{al}}F_f$$

With Protection:

$$ED_{\text{HD w/protection (0-1 min, SY, RE, OC)}} = D_{\text{av}}$$

$$ED_{\text{HD w/protection (0-9 min, percutaneous/SK)}} = D_{\text{bv}} + D_{\text{bl}}F_{\text{f}}$$

This effective dose is used in the DICE algorithms. To calculate performance, a symptom severity category for each system – ocular, respiratory, systemic, and skin – is assigned based on the effective dose. The symptom severity category changes over time as described in Appendix K. These symptom severity categories are used in the calculation of performance as described in Appendix L.

APPENDIX K

CONSTRUCTION OF EXPOSURE RANGES

A. Construction of Exposure Ranges for GB

To establish the exposure ranges for GB, the 10%, 50% and 90% incidence doses for mild ocular effects, severe inhalation effects, and lethality inhalation were used. These values can be calculated from Figure K-1, shown below. In addition, distinct signs and symptoms, as discussed by Deverill and the ranges normally associated with the symptomatology¹ provided the basis for the established exposure ranges.

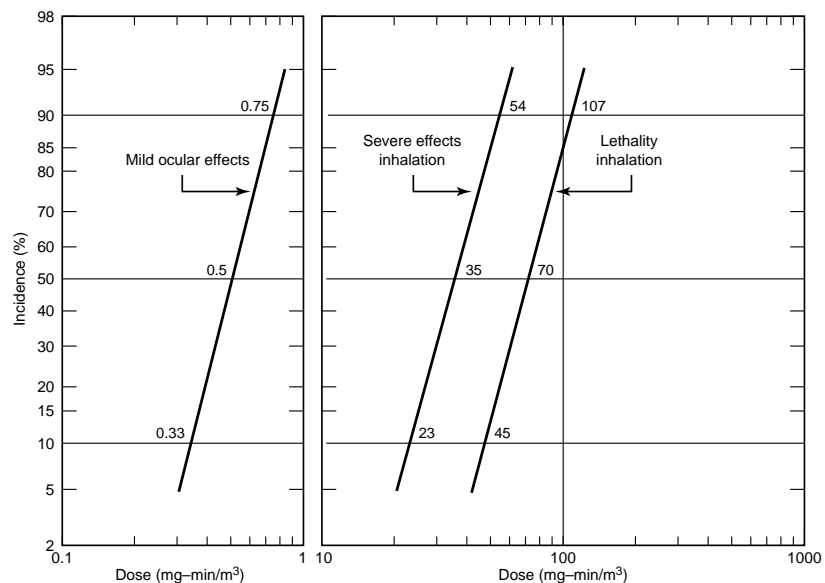


Figure K-1. Inhalation and Ocular Dose response for GB vapor exposure endpoints

¹ Deverill et al., 1994

Figure K-2 shows the percutaneous effects due to liquid and vapor exposure to GB. As seen on the chart, the exposure values required to produce incidence doses due to percutaneous GB liquid and vapor exposure are significantly higher (approximately ten times) than the incidence doses required to produce effects due to GB inhalation. This difference – and the absence of measurable GB liquid exposures within VLSTRACK – may have contributed to the AMedP-8 working group’s decision to neglect liquid exposure to GB; no specific information, however, is provided as to why this decision was made.

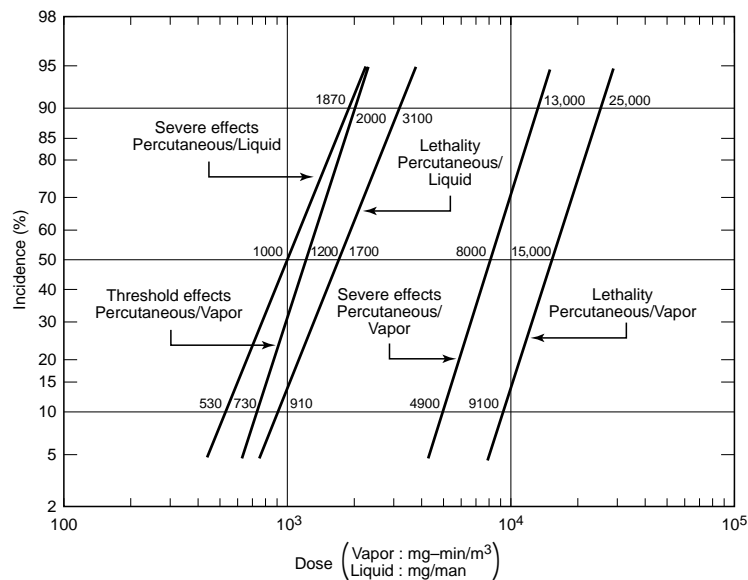


Figure K-2. Percutaneous Dose response for GB vapor and liquid exposure endpoints

B. Construction of Exposure Ranges for VX

Establishing the exposure boundaries for VX could not be based on expected symptomatology due to lack of research. The toxicity mechanism for VX (acetylcholinesterase inhibition) is, however, the same as that resulting from GB exposure. Therefore, the signs and symptoms are expected to be qualitatively the same. In order to establish the VX ranges, VX incidence doses similar to those for GB were used. The incidence exposure values due to inhalation of VX can be determined from Figure K-3; the range boundaries selected for VX yield the same incidence as those initially determined for GB. Table K-1 compares these values and shows the established ranges and injury severity categories for GB and VX due to inhalation effects.

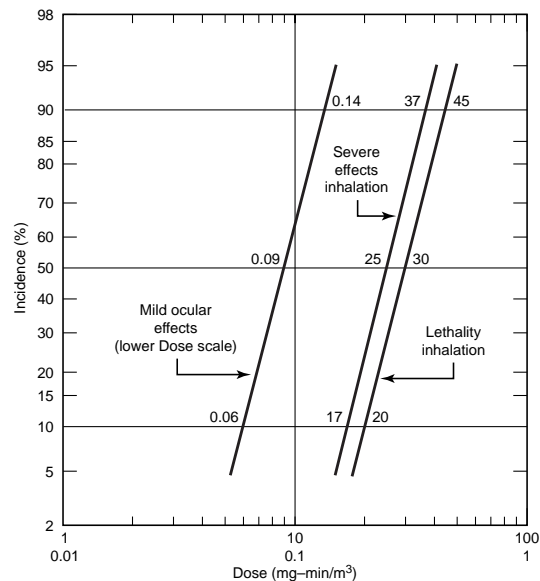


Figure K-3. Inhalation and Ocular Dose response for VX vapor exposure endpoints

Table K-1: Construction of exposure ranges for VX vapor inhalation injury categories based on comparison with GB vapor inhalation categories. (McClellan, Anno, Matheson, 1998, pg. 9)

Injury Category	GB Vapor Inhalation Exposure (mg-min/m ³)		VX Vapor Inhalation Exposure (mg-min/m ³)	
	Exposure Boundary	Exposure for Effect	Exposure Boundary	Exposure for Effect
	0		0	
1		No injury		No injury
	0.25		0.05	
2		ECt ₁₀ (ocular) = 0.33 ECt ₉₀ ECt ₉₀ (ocular) = 0.75		ECt ₁₀ (ocular) = 0.06 ECt ₉₀ (ocular) = 0.14
	3		2	
3				same ratio of exposure boundaries as GB
	6		4	
4				same ratio of exposure boundaries as GB
	15		10	
5		ECt ₁₀ (severe) = 23		ECt ₁₀ (severe) = 17
	30		19	
6		ECt ₅₀ (severe) = 35 LCt ₁₀ = 45		ECt ₅₀ (severe) = 25 LCt ₁₀ = 20
	50		29	
7		ECt ₉₀ (severe) = 54 LCt ₅₀ = 70		ECt ₉₀ (severe) = 37 LCt ₅₀ = 30
	75		40	
8		LCt ₉₀ = 107		LCt ₉₀ = 45

Due to the persistent nature of VX and the lower concentrations required for percutaneous effects due to both liquid and vapor (shown in Figure K-4), VX percutaneous doses were not discounted. In order to determine the dose ranges for percutaneous exposure to VX, a similar table was generated to compare VX exposure ranges resulting in inhalation effects and VX dose ranges resulting from percutaneous liquid exposure. This comparison is shown on Table K-2. VX ocular effects are considered separately from percutaneous effects, and thus, for the lower injury severity category bounds, only similar ratios – as opposed to effects – are considered.

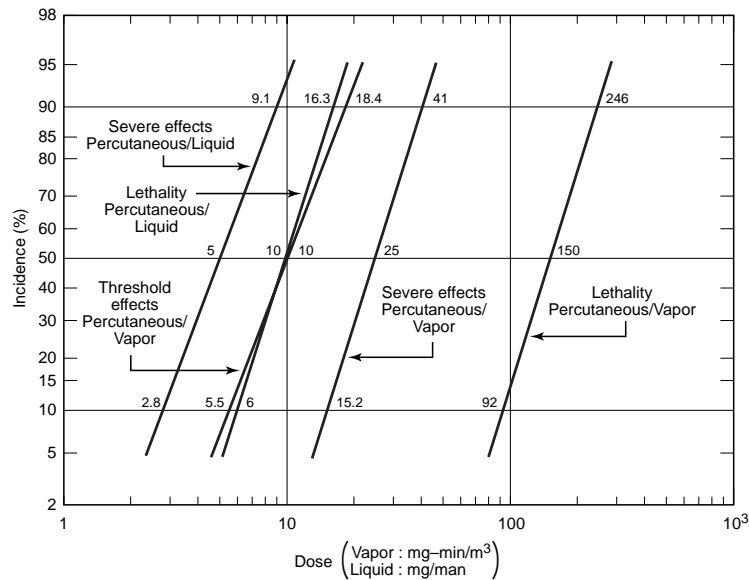


Figure K-4. Percutaneous Dose response for VX vapor and liquid exposure endpoints

Table K-2: Construction of exposure ranges for percutaneous liquid VX injury categories based on comparison with VX vapor inhalation categories. (McClellan, Anno, Matheson, 1998, pg. 10)

Injury Category	VX Vapor Inhalation Exposure (mg-min/m ³)		VX Liquid Percutaneous Exposure (mg/70 kg man)	
	Exposure Boundary	Exposure for Effect	Dose ² Boundary	Dose for Effect
	0		0	
1		No injury		No injury
	0.05		0.01	
2		ECt ₁₀ (ocular) = 0.06 ECt ₉₀ (ocular) = 0.14		same ratio of exposure boundaries
	2		0.4	
3		same ratio of exposure boundaries as GB		same ratio of exposure boundaries
	4		0.8	
4		same ratio of exposure boundaries as GB		same ratio of exposure boundaries
	10		2	
5		ECt ₁₀ (severe) = 17		ED ₁₀ (severe) = 2.8
	19		4	
6		ECt ₅₀ (severe) = 25 LCt ₁₀ = 20		ED ₅₀ (severe) = 5 LD ₁₀ = 6
	29		8	
7		ECt ₉₀ (severe) = 37 LCt ₅₀ = 30		ED ₉₀ (severe) = 9 LD ₅₀ = 10
	40		12	
8		LCt ₉₀ = 107		LCt ₉₀ = 16

² These dose boundaries are also applicable to deposition in mg/m² under the assumption of an effective exposed skin area of 1 m²/person.

APPENDIX L

PERFORMANCE FACTOR MEASURES

A. Definitions and Variables

S/S	signs and symptoms
t_0	the normative task performance time when in a normal healthy state
t	time required to perform the task when a state of illness prevails (Note: t is always greater than t_0)
p	qualitative performance, expressed by the ratio t_0/t
t_{ijk}	the estimated task time for the j^{th} task provided by the i^{th} respondent covering the k^{th} S/S complex
β'	vector of estimated regression coefficients – provides the weighting of the severity of each different physical system on performance
x'_k	vector of integers describing the symptom severity of each different physical system
\hat{P}_k	expected value of task performance (post application of a smoothing function)
P_1	expected performance when all symptom severity category values are one – individual is in good health (pre application of a smoothing function)
P_m	highest possible performance when a single symptom severity category is greater than one
ΔP	the difference between one and P_1
α	performance smoothing function
δ	correction factor applied to performance smoothing function equal to 0.01.

B. Agent Symptomatology

The first step in determining the impacts of chemical agent exposure on performance was to classify the signs and symptoms (S/S) for each agent and determine, given some initial dose, at what time which symptoms could be expected. S/S tables were generated for GB and HD. For GB six systems were modeled – upper gastrointestinal, lower gastrointestinal, muscular, ocular, respiratory, and mental; four systems were used for HD – skin, systemic, respiratory, and ocular. The impact of each agent on the specified systems was categorized in terms of the amount and type of resultant distress using five levels of severity, ranging from one (lowest) to five (most severe). These symptomatology tables are shown below (Table L-1, GB, and Table L-2, HD); a specific table was not created for VX. Because of the identical toxicity mechanisms for GB and VX, the S/Ss could be expected to be qualitatively the same.

Using these symptomatology levels, a general time- and dose-relationship table was established for both GB and HD, following the Defense Nuclear Agency/Intermediate Dose Program (DNA/IDP) methodology¹. These tables are shown as Figures L-1 and L-2. The order of the digits in each of the blocks in Figures L-1 and L-2 corresponds to the order of the severity categories as listed in the S/S tables.

Using agent ranges of interest, the S/S for GB and HD were used to estimate the impact of these agents on performance of crewmembers performing close combat light (CCL) infantry and artillery tasks. A questionnaire was generated, listing specific and general CCL tasks, along with a set of symptoms corresponding to a particular S/S set.

The M119A Light Howitzer was selected as representative of CCL tasks, and subject matter experts (SME) were surveyed, using the questionnaires, to determine how different symptoms affected their ability to perform combat-related tasks. For the series of tasks and a set of symptoms (as listed on the S/S tables), the SMEs were asked to evaluate how long the tasks would take and their level of confidence in their own responses. The performance data gathered from the questionnaires was averaged over the respondents, in order to prepare it for the regression analysis.²

Of note, graphical and typographical inaccuracies were noted in the original DICE sign/symptom severity data for HD. In addition, in 1997, further research was completed by Dr. Millard M. Mershon on the ocular effects post-exposure to HD. These corrections and updates were incorporated into the final algorithms and the final DICE calculation models. In McClellan, et. al, these changes are included as four graphical representations of the sign/symptom severity for each affected system. An updated sign/symptom complex chart including these changes is included as Table L-3.

¹ McClellan et al., 1998. Note: Tables L-1 and L-2 and Figures L-1 and L-2 also from McClellan, et al.

² Anno, G.H., D. B. Wilson, and M. A. Dore, 1984.

Table L-1. GB signs and symptoms
(Textual Descriptions for Questionnaires)

UG: Upper Gastrointestinal Distress

- 1 No effect
- 2 Burning feeling above the stomach
- 3 Nauseated, mouth waters, sweating
- 4 Vomited once or twice, nauseated and may vomit again
- 5 Vomited several times, including dry heaves

LG: Lower Gastrointestinal Distress

- 1 No effect
- 2 Abdominal pain
- 3 Abdominal cramps, with diarrhea once or twice
- 4 Frequent diarrhea, with awful gut cramps
- 5 Uncontrollable diarrhea and urination

MU: Muscular Distress

- 1 No effect
- 2 Muscles twitch, feeling somewhat tired and weak
- 3 Muscles tremble, uncoordinated, feeling tired and weak
- 4 Whole body trembles with sporadic convulsions
- 5 Paralyzed

OC: Ocular Distress

- 1 No effect
- 2 Vision is slightly blurred and dim
- 3 Vision is blurred and dim, and pressure is felt behind the eyes
- 4 Light hurts eyes, headache, with very blurred and dim vision
- 5 Extreme headache and temporary blindness

RE: Respiratory Distress

- 1 No effect
- 2 Tight chest, coughing, and runny nose
- 3 Difficult to breathe, wheezing breath, respiratory congestion
- 4 Breathing sporadically stops and starts, skin has a purple or blue color
- 5 Breathing stops completely

ME: Mental Distress

- 1 No effect
 - 2 Anxious and irritable
 - 3 Hard to remember or concentrate
 - 4 Cannot remember or concentrate
 - 5 Unconscious
-

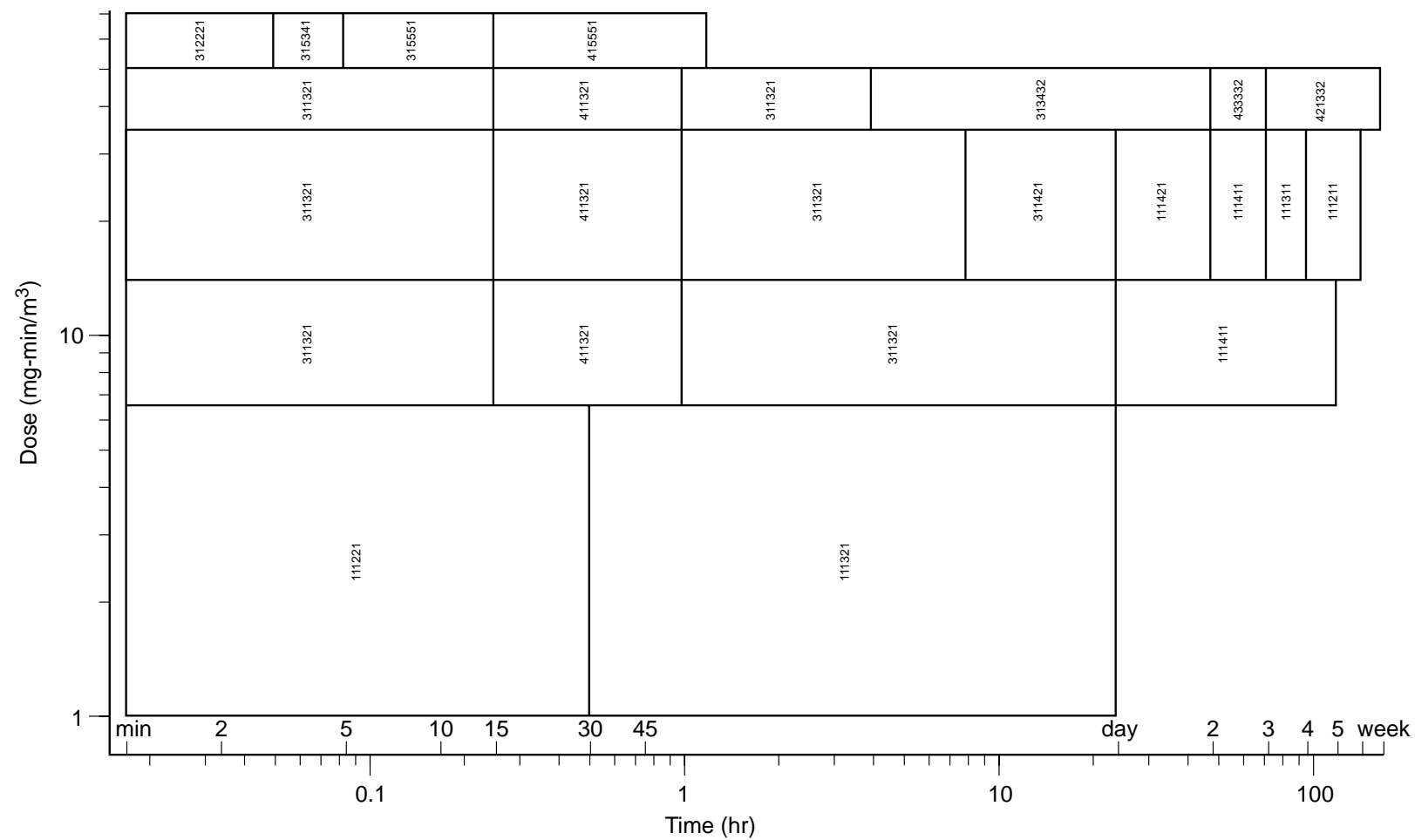


Table L-2. HD signs and symptoms
(Textual Descriptions for Questionnaires)

SK: Skin Damage

- 1 No effect
- 2 Skin sensitive to touch in crotch, armpits, and on inside of elbow and knee joints
- 3 Skin sore in crotch, armpits, elbow and knee joints, and painful when moving, red swollen skin, tiny blisters on hands and neck
- 4 Skin raw and painful in crotch, armpits, elbow and knee joints, red swollen body skin, large blisters on hands and neck
- 5 Skin peels off leaving open raw areas and painful blisters

SY: Systemic Damage

- 1 No effect
- 2 Nauseated and swallows often
- 3 Headache, nauseated, vomited once or twice
- 4 Headache and fever, vomited several times and will again
- 5 Pounding headache, dry heaves, fatigued from vomiting

RE: Respiratory Damage

- 1 No effect
- 2 Dry mouth, dry cough, sneezing, and runny nose
- 3 Sore throat, continuous coughing, hoarse voice, chest feels tight
- 4 Hurts to breathe, hacking cough, cannot speak
- 5 Awful chest pain, wheezing and short of breath, coughs up red-colored mucus

OC: Ocular Damage

- 1 No effect
 - 2 Eye sting and tear
 - 3 Eyes feel gritty and sensitive to light, nonstop tears flood eyes
 - 4 Eyelids puffy and eyes burn, painful to keep open
 - 5 Eyelids swollen shut and burning eyes too painful to open
-

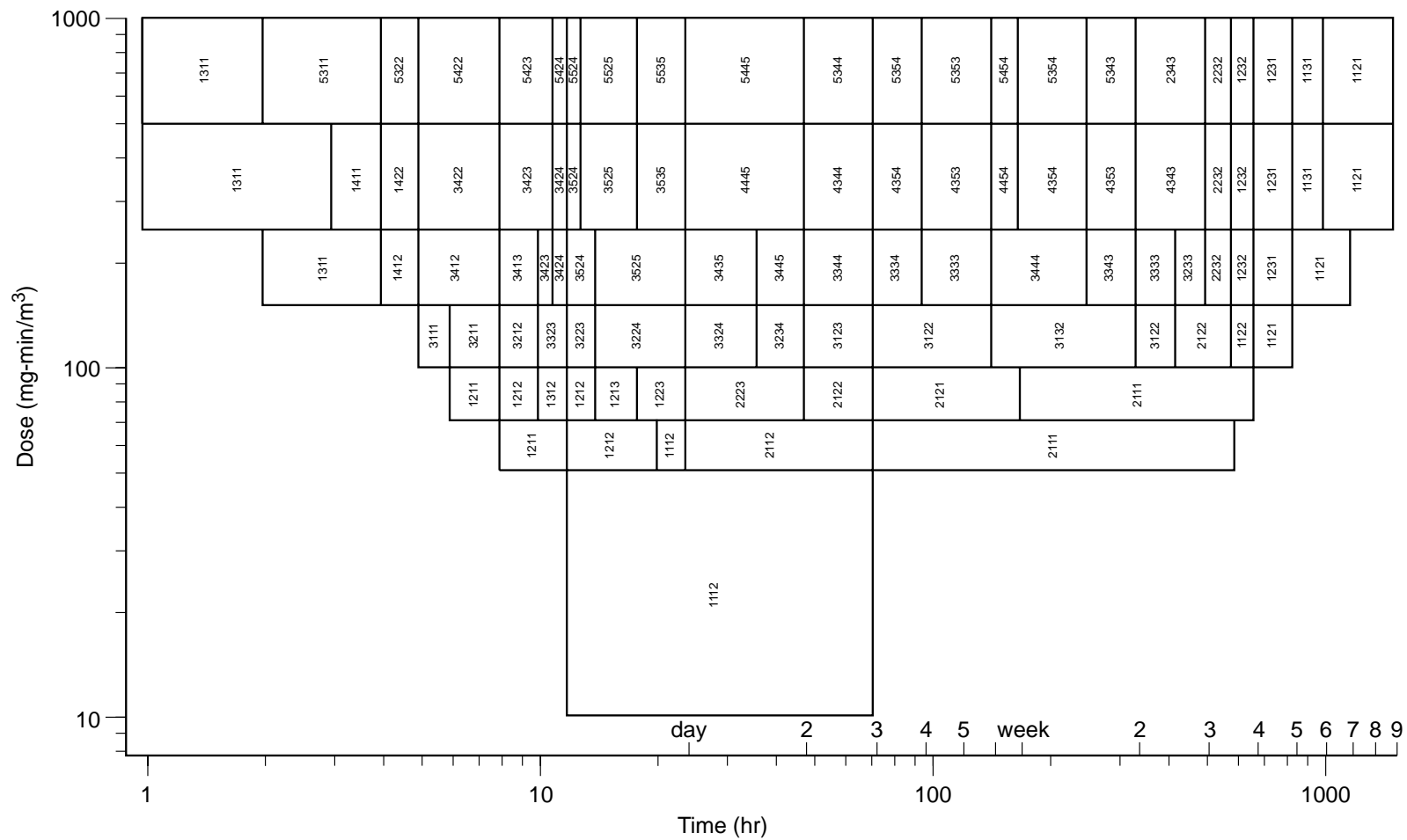


Figure L-2. Sign/symptom complexes for wet skin exposure to HD (mustard gas)



Figure L-3. Sign/symptom complexes for wet skin exposure to HD (mustard gas) – updated to reflect DICE corrections and additional research

C. Performance Measures

The measure of performance for military combat tasks will be considered as a function of time; although performance is usually a function of both time and accuracy, it was determined that evaluating accuracy reductions as a result of chemical exposures was extremely difficult for the SMEs. This was partially due to the tendency of SMEs to regards tasks as either “complete” or “incomplete” without regard to the accuracy or delays that might result from attempts to maintain accuracy. Thus, performance (p) can be regarded as the time ratio of normative task performance time when in a healthy state (t_0) to the time required to perform the task when in a state of illness as described by a set of symptoms (t).

$$p = t_0/t$$

When in good health then, $p = 1$, and if the task cannot be performed, $p = 0$.

In order to determine the average performance over N number of respondents, a new time variable (t_{ijk}) was introduced – the time estimated for the j^{th} task provided by the i^{th} respondent considering the k^{th} S/S complex. Using this definition, the average performance for the j^{th} task given the k^{th} S/S complex is:

$$P_{jk} = \frac{1}{N} \sum_{i=1}^N (t_{0j} / t_{ijk}) \quad (0 \leq P_{jk} \leq 1)$$

D. Performance Function

Multivariate regression analyses were used to derive the task performance functions. A logistic transformation was used to predict performance values and ensure that those values lie within the expected interval (0 to 1). The primary assumption of the logistic model is that the performance can be expressed as some function of a linear combination of the factor (symptom severity) variables – there are six corresponding variables to describe each time/dose GB relationship and four corresponding variables to describe the HD time/dose relationships.

Using the performance factor designated above – an averaged estimate of performance for the j^{th} task and the k^{th} S/S complex – the logistic regression model may be represented by:

$$\ln \left(\frac{P_{jk}}{1-P_{jk}} \right) = \mathbf{x}'_k \boldsymbol{\beta} + \boldsymbol{\varepsilon}_k, \quad (1 \leq k \leq K)$$

The \mathbf{x}'_k vector represents integers for denoting symptom severity level for the k^{th} symptom severity level and the l^{th} symptom category. $\boldsymbol{\beta}'$ is a vector of regression coefficients that are

estimated. Both vector sets contain an additional component corresponding to the intercept. Thus, there are seven coefficients for GB and five for HD.

The next step is to determine a means for predicting performance values for any S/S complex, x_k . Beginning with the equation above:

$$\ln \left(\frac{P_{jk}}{1-P_{jk}} \right) = \mathbf{x}'_k \boldsymbol{\beta} + \varepsilon_k, \quad (1 \leq k \leq K)$$

$$\left(\frac{P_{jk}}{1-P_{jk}} \right) = e^{(x'_k \beta + \varepsilon_k)}, \quad (1 \leq k \leq K)$$

$$P_{jk} = e^{(x'_k \beta + \varepsilon_k)} (1 - P_{jk}), \quad (1 \leq k \leq K)$$

$$P_{jk} (1 + e^{(x'_k \beta + \varepsilon_k)}) = e^{(x'_k \beta + \varepsilon_k)}, \quad (1 \leq k \leq K)$$

$$P_{jk} = \frac{e^{(x'_k \beta + \varepsilon_k)}}{(1 + e^{(x'_k \beta + \varepsilon_k)})}, \quad (1 \leq k \leq K)$$

$$P_{jk} = \left(1 + e^{-(x'_k \beta + \varepsilon_k)} \right)^{-1}, \quad (1 \leq k \leq K)$$

Finally, the inverse transformation of the logistic regression can be applied to yield the performance function for predicting expected values of task performance for any S/S complex, given as:

$$\hat{P}_k = \left(1 + e^{-(x'_k \hat{\beta})} \right)^{-1}, \quad (1 \leq k \leq K)$$

The performance measure of a particular crewmember is based on a composite of two or more separate tasks. The beta coefficients and statistical parameters resulting from the regression analysis are compiled in Tables L-3 and L-4 for GB and HD respectively.

**Table L-3. Performance regression summary for GB: No. 1 cannoneer (loader)
(from McClellan, et al.)**

Degrees of freedom: 23
 F(6, 23): 61.2900
 Prob > F: <.0005
 R-square: .9411
 Adj R-square: .9258
 Root MSE: .24715

Symptom	β Coefficient	Standard Error	t	P > t	95% Confidence	
					Interval	
Intercept	5.675684	.354942	15.990	<.0005	4.9414300	6.4099370
Upper Gastro	-.501250	.041804	-11.990	<.0005	-.5877290	-.4147716
Lower Gastro	-.626904	.062884	-9.969	<.0005	-.7569887	-.4968186
Muscular	-.978815	.065066	-15.043	<.0005	-1.1134140	-.8442152
Ocular	-.822573	.097043	-8.476	<.0005	-1.0233220	-.6218234
Respiratory	-.657991	.059124	-11.129	<.0005	-.7802975	-.5356843
Mental	-.556144	.067417	-8.249	<.0005	-.6956061	-.4166821

Table L-4. Performance regression summary for HD: No. 1 cannoneer (loader)⁵⁵

Degrees of freedom: 25
 F(4, 25): 18.5200
 Prob > F: <.00005
 R-square: .7477
 Adj R-square: .7073
 Root MSE: .71362

Symptom	β Coefficient	Standard Error	t	P > t	95% Confidence	
					Interval	
Intercept	6.647001	.929549	7.151	<.0005	4.7325590	8.5614430
Skin Damage	-1.425135	.166689	-8.550	<.0005	-1.7684380	- 1.0818330
Systemic	-.786148	.166325	-4.727	<.0005	-1.1287010	-.4435950
Respiratory	-.625109	.160978	-3.883	<.0005	-.9566491	-.2935684
Ocular	-.900659	.268601	-3.353	.003	-1.4538520	-.3474651

⁵⁵ From McClellan et al., 1998.

E. Performance-Based Casualty Calculations

Performance can be calculated utilizing the equations determined above, however, performance when all of the sign/symptom severity factors are at their lowest – all equal one – does not result in a $\hat{P}_k=1$. A smoothing factor is applied to force $\hat{P}_k=1$; this impacts only the performance at the lowest sign/symptom severities (highest performance) while not affecting lower performance values. The final equation for calculating performance is:

$$\hat{P}'_k = \hat{P}_k + \Delta P * e^{(-\alpha * (P_1 - \hat{P}_k))}, \quad (1 \leq k \leq K)$$

$$\text{where } \alpha = (P_1 - P_m)^{-1} * \ln(\Delta P / \delta) \quad \text{and} \quad \Delta P = 1 - P_1$$

where \hat{P}'_k is the smoothed performance. The calculation and derivation of the variables used in the performance function for GB and HD are included in their entirety as Tables L-5 and L-6 respectively.

Although time is not an explicit variable in the above equation, performance does change with time as a function of the sign/symptom severities. In the hours, days, and weeks following agent exposure, some signs/symptoms improve while others worsen (as shown in the sign/symptom severity profiles), resulting in performance changes over time. Figure L-4 shows how performance capabilities change over time for a loader for a set of several different initial exposures between ten and one thousand mg-min/m³. Performance, therefore, needs to be calculated at several different time periods to obtain a useful picture of decreased performance, casualties, fatalities, and returns to duty.

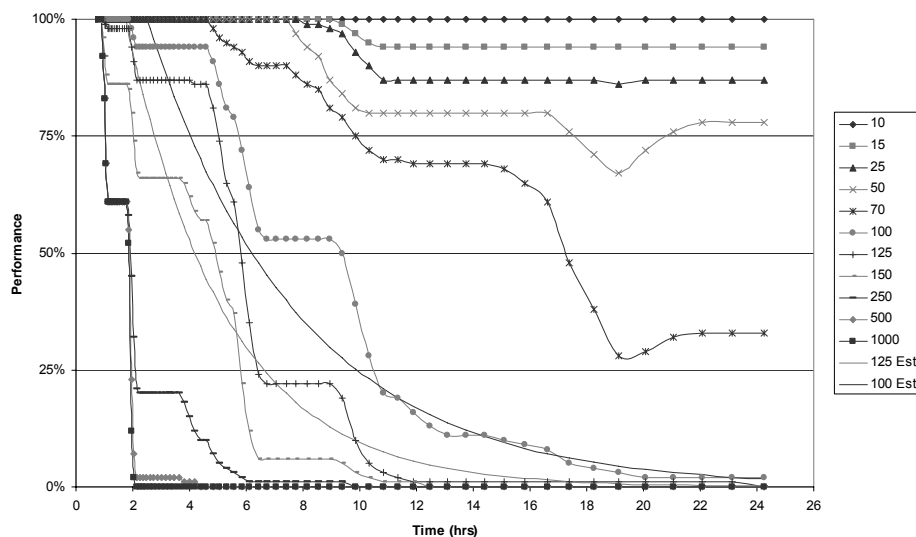


Figure L-4. Loader Performance Capability Changes over Time for HD Vapor Exposures (mg-min/m³)

Table L-5. Performance Function Calculation for GB

Smoothed Performance Function

Step 1: Identify Constants and Equations

B0 =	5.675684	intercept	Pk =	$(1 + \exp(-x^k \cdot B))^{\alpha-1}$
B1 =	-0.50125	upper GI	$\Delta P =$	1 - P1
B2 =	-0.626904	lower GI	$\alpha =$	$(P1 - Pm)^{-1} \ln(\Delta P / \delta)$
B3 =	-0.978815	muscular	P'k =	$Pk + \Delta P \cdot e^{-\alpha \cdot (P1 - Pk)}$
B4 =	-0.822573	ocular		
B5 =	-0.657991	respiratory		
B6 =	-0.556144	mental		
$\delta =$	0.01	correction factor		

Step 2: Calculate Unsmoothed Performance at P1 = Pk(1,1,1,1,1)

P1 =	Pk(1,1,1,1,1,1,1)					
P1 =	(1 + exp(-x0*B0 + -x1*B1 + -x2*B2 + -x3*B3 + -x4*B4 + -x5*B5 + -x6*B6))^A-1					
x0 =	1	x0*B0 =	5.675684			
x1 =	1	x1*B1 =	-0.50125	x4 =	1	x4*B4 = -0.822573
x2 =	1	x2*B2 =	-0.626904	x5 =	1	x5*B5 = -0.657991
x3 =	1	x3*B3 =	-0.978815	x6 =	1	x6*B6 = -0.556144
P1 =	0.8223					

Step 3: Determine Pm, the highest possible performance when a single sign/symptom severity category is greater than one

Pm =	Pk(1,2,1,1,1,1)			
Pm =	$(1 + \exp(-x0 \cdot B0 + -x1 \cdot B1 + -x2 \cdot B2 + -x3 \cdot B3 + -x4 \cdot B4 + -x5 \cdot B5 + -x6 \cdot B6))^{\alpha-1}$			

	x0	x1	x2	x3	x4	x5	x6
x'k(1,2,1,1,1,1) =	1	2	1	1	1	1	1
x'k*B' =	5.675684	-1.0025	-0.626904	-0.978815	-0.822573	-0.657991	-0.556144
Pk(1,2,1,1,1,1) =	0.737063						
x'k(1,1,2,1,1,1) =	1	1	2	1	1	1	1
x'k*B' =	5.675684	-0.50125	-1.253808	-0.978815	-0.822573	-0.657991	-0.556144
Pk(1,1,2,1,1,1) =	0.711997						
x'k(1,1,1,2,1,1) =	1	1	1	2	1	1	1
x'k*B' =	5.675684	-0.50125	-0.626904	-1.95763	-0.822573	-0.657991	-0.556144
Pk(1,1,1,2,1,1) =	0.634876						
x'k(1,1,1,1,2,1) =	1	1	1	1	2	1	1
x'k*B' =	5.675684	-0.50125	-0.626904	-0.978815	-1.645146	-0.657991	-0.556144
Pk(1,1,1,1,2,1) =	0.670276						
x'k(1,1,1,1,1,2) =	1	1	1	1	1	2	1
x'k*B' =	5.675684	-0.50125	-0.626904	-0.978815	-0.822573	-1.315982	-0.556144
Pk(1,1,1,1,1,2) =	0.705581						
x'k(1,1,1,1,1,1,2) =	1	1	1	1	1	1	2
x'k*B' =	5.675684	-0.50125	-0.626904	-0.978815	-0.822573	-0.657991	-1.112288
Pk(1,1,1,1,1,1,2) =	0.726287						

Pm =	Pk(1,2,1,1,1,1) =	0.737063
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Step 4: Calculate Smoothing Factor α

$\Delta P =$	1 - P1	0.1777
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$$\alpha = (P1 - Pm)^{-1} \ln(\Delta P / \delta)$$

$\alpha =$	15.35296
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Step 5: Calculate P'k, Smoothed Performance

P'k =	Pk + $\Delta P \cdot e^{-\alpha \cdot (P1 - Pk)}$
P'k(1,1,1,1,1,1) =	1

Table L-6. Performance Function Calculation for HD

Smoothed Performance Function

Step 1: Identify Constants and Equations

B0 =	6.647001	intercept	Pk =	$(1 + \exp(-x'k*B))^{-1}$
B1 =	-1.425135	skin	$\Delta P =$	$1 - P1$
B2 =	-0.786148	systemic	$\alpha =$	$(P1 - Pm)^{-1} \ln(\Delta P / \delta)$
B3 =	-0.625109	respiratory	P'k =	$Pk + \Delta P * e^{(-\alpha*(P1-Pk))}$
B4 =	-0.900659	ocular		
$\delta =$	0.01	correction factor		

Step 2: Calculate Unsmoothed Performance at P1 = Pk(1,1,1,1,1)

$P1 = Pk(1,1,1,1,1)$
 $P1 = (1 + \exp(-x0*B0 - x1*B1 - x2*B2 - x3*B3 - x4*B4))^{-1}$
 $x0 = 1 \quad x0*B0 = 6.647001$
 $x1 = 1 \quad x1*B1 = -1.425135$
 $x2 = 1 \quad x2*B2 = -0.786148$
 $x3 = 1 \quad x3*B3 = -0.625109$
 $x4 = 1 \quad x4*B4 = -0.900659$
 $P1 = 0.948336$

Step 3: Determine Pm, the highest possible performance when a single sign/symptom severity category is greater than one

$Pm = Pk(1,1,1,2,1)$
 $Pm = (1 + \exp(-x0*B0 - x1*B1 - x2*B2 - x3*B3 - x4*B4))^{-1}$

	x0	x1	x2	x3	x4
$x'k(1,2,1,1,1) =$	1	2	1	1	1
$x'k*B' =$	6.647001	-2.85027	-0.786148	-0.625109	-0.900659
$Pk(1,2,1,1,1) =$	0.815299				
$x'k(1,1,2,1,1) =$	1	1	2	1	1
$x'k*B' =$	6.647001	-1.425135	-1.572296	-0.625109	-0.900659
$Pk(1,1,2,1,1) =$	0.893195				
$x'k(1,1,1,2,1) =$	1	1	1	2	1
$x'k*B' =$	6.647001	-1.425135	-0.786148	-1.250218	-0.900659
$Pk(1,1,1,2,1) =$	0.907614				
$x'k(1,1,1,1,2) =$	1	1	1	1	2
$x'k*B' =$	6.647001	-1.425135	-0.786148	-0.625109	-1.801318
$Pk(1,1,1,1,2) =$	0.881769				

$Pm = Pk(1,1,1,2,1) = 0.907614$

Step 4: Calculate Smoothing Factor α

$\Delta P = 1 - P1 = 0.051664$

$\alpha = (P1 - Pm)^{-1} \ln(\Delta P / \delta)$

$\alpha = 40.32611$

Step 5: Calculate P'k, Smoothed Performance

$P'k = Pk + \Delta P * e^{(-\alpha*(P1-Pk))}$

$P'k(1,1,1,1,1) = 1$

F. AMedP-8 Chemical Table Generation

There are two types of categories for exposed personnel, as represented by the tables in Sections 4 through 10 of the AMedP-8 Chemical Manual; one presents typical injuries sustained by personnel exposed to various chemical exposure levels, while the other indicates post-attack performance capability.

A person becomes a casualty when their performance decreases to 25% or lower. An injury category is assigned when the person becomes a casualty. For GB and VX, the typical injuries by category are determined by taking the initial effective exposure and entering it into the Injury Severity Category tables (shown in Section Four).

For HD, determining the injury category is a two step process. First, when the individual becomes a casualty, they are classified as some combination of injury severity categories – i.e., Eye-Respiratory-Skin, Eye-Skin, or Respiratory only – on the basis of their sign/symptom severity in each category. An eye or skin injury category is assigned when the associated sign/symptom severity category is greater than or equal to two. A respiratory injury category is assigned when either the respiratory or systemic sign/symptom severities are greater than or equal to two. Once assigned, the individual remains in the prescribed injury severity category until they become a fatality (performance decreases to less than .0001 for GB and VX, .000023 for HD) or return to duty (performance increases to greater than 75%). Additionally, in the Personnel by Injury Category Table, individuals are assigned a numerical injury category. This category is determined by using the vapor (for ocular and respiratory/systemic) and effective (for skin) exposures and determining the applicable injury severity number for each system. Thus, for example, an individual with a vapor exposure of 25 mg-min/m³ and an effective exposure of 90 mg-min/m³, will have a final injury severity code of 2-1-2.

It may be important to note that although injury severity category six is the highest category given for eye effects due to HD exposure, category five is the highest category assigned in the tables given in Appendices 4-10 of AMED P-8 Chemical. Calculations to produce appendices A-F for this document indicate that approximately fifty attacks resulted in ocular HD injury severity category six.

To determine performance bands, casualty status, and fatalities, the performance equation described above was used. For all three agents – GB, VX, and HD – performance was calculated at ten different time periods – 3 hours, 1-7 days, 15 days, and 30 days. If at any time during those periods performance dropped to 25% or lower, the individual became a casualty and a casualty flag was assigned; similarly, if performance dropped below the prescribed fatality threshold, the individual became a fatality.

One additional note is important. When calculating performance on the edges of the injury category ranges (exposures of 25, 50, 70, 100, etc. measured in mg-min/m³), the sign/symptom severity for both the upper and lower category were averaged to determine the sign/symptom severity at that time period. For example, at three hours, the sign/symptom severity for range 50-70mg-min/m³ is 1 and the sign/symptom severity range for 70-100 mg-min/m³ is 2, therefore, when modeled during the generation of AMedP-8 Chemical, the two sign/symptom severities were averaged and a severity of 1.5 was used to determine performance at three hours for 70 mg-min/m³.

APPENDIX M

GLOSSARY

Aimpoint: the attack location where the weapon is first released, characterized by geographic coordinates (x,y) .

Casualty: an individual whose performance is degraded to less than or equal to 25% of original capability and, as a consequence, must enter the medical system.

Dose: the mass of agent received (via inhalation or percutaneous route) by an individual, expressed in milligrams. Dose can be correlated to performance profile through the use of DICE algorithms.

Dosage: for the purposes of this paper, used interchangeably with exposure; see “exposure.”

Equivalent dose: the single vapor dose expected to produce equivalent injury severity signs and symptoms as those resulting from the combination of vapor and liquid doses received.

Exposure: time-integrated environmental concentration; vapor (mg-min/m^3), liquid (mg/m^2). To obtain dose, one must multiply vapor exposure by breathing rate, and liquid exposure by effective skin area, arriving at a dose in mg for both cases.

Gridpoint number (also called grid position number): in a troop array, BioStrike assigns gridpoint numbers to each occupied coordinate; thus, troops located in a particular position on the coordinate system can be identified by both a gridpoint number and geographic coordinates (x,y) .

Icon: in a troop array, an individual or group of individuals collocated at a single geographic coordinate are considered an icon and assigned an icon number.

Injury Severity Category (ISC): a numerical scale developed to characterize effects from chemical agents at different levels of exposure; each ISC number corresponds to an exposure range, description of the signs and/or symptoms of injury for the worst case exposure in that range, and a brief phrase that summarizes these effects.

Insult: the amount of chemical agent or other hazard that causes bodily injury, irritation or trauma; may also be used to describe the type of injury or irritation resulting from exposure to a hazard.

Optimal aimpoint: the aimpoint that would result in the greatest number of alive but incapacitated individuals in the immediate aftermath of an attack.

Out-of-area operation: an operation located outside of the defined area of responsibility of NATO; the area of responsibility for NATO is typically within the borders of NATO countries. An out-of-area operation usually implies an explicit invitation and a decision by the NATO council for individual countries to participate.

Performance: the capability of individuals to carry out general combat tasks at various times after exposure to chemical agent.

Return to Duty (RTD): an individual who was a casualty but has recovered to at least 75% of original capability, and, as a result, leaves the medical system and reports back to duty.

Sign/symptom complex (or sign/symptom severity profile): a four-digit (HD) or six-digit (GB, VX) number that delineates the severity of symptoms for each set of bodily systems as a function of equivalent dose, time, and physiological system affected.

Worst-case meteorological conditions: conditions that result in the largest geographic area spanned by agent concentrations greater than or equal to incapacitating levels.

APPENDIX N

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14. ABSTRACT In 1996, the Institute for Defense Analyses (IDA) began to participate in the development of Allied Medical Publication 8, <i>Medical Planning Guide of NBC Battle Casualties, Chemical</i> (AMedP-8 Chemical) for the US Army Office of the Surgeon General (OTSG). This task employed contemporary modeling and simulation tools to estimate the numbers and types of casualties that would result over time from an attack with a chemical weapon. In the models, attacks with GB, VX, and HD occurred in the setting of various tactical scenarios. As part of the current task for OTSG, IDA has documented the efforts of 1996-2001 that produced and ratified AMedP-8 Chemical. The documentation describes the use of VLSTRACK and BioStrike models for optimizing aimpoints and estimating chemical exposure, and the use of the DICE/IDP methodology to estimate casualties based on chemical exposure. It presents modeling inputs and assumptions, detailed descriptions of the tactical scenarios, and chemical exposure data used to produce the document. It also contains tables summarizing casualty scenarios in the document and recommends areas for revisions to be considered for future versions of AMedP-8 Chemical.					
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